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AFSC 305X4(U) AIR FORCE OCCUPATIONAL MEASUREMENT CENTER
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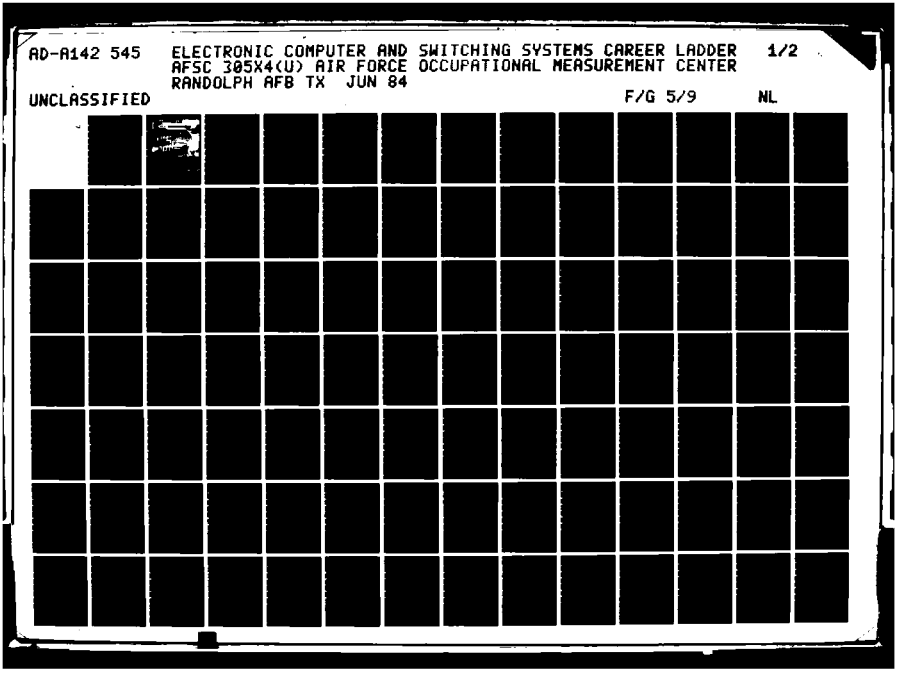

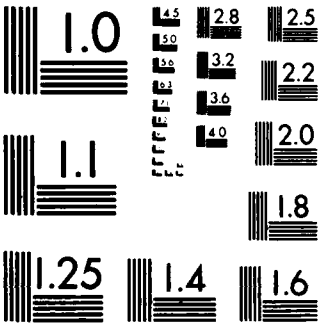


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UNITED STATES AIR FORCE

# OCCUPATIONAL SURVEY REPORT

ELECTRONIC COMPUTER AND SWITCHING SYSTEMS
CAREER LADDER

AFSC 305X4

AFPT 90-305-488

JUNE 1984

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OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
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# PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Electronic Computer and Switching Systems career ladder (AFSC 305X4). The project was undertaken at the request of Keesler Technical Training Center (KTTC), and was directed by USAF Program Technical Training, Volume Two, dated June 1982. Authority for conducting occupational surveys is contained in AFR 35-2. Computer printouts from which this report was produced are available for use by operating and training officials.

The survey instrument was developed by Captain Gary K. Patterson, Inventory Development Specialist. Sergeant Ray Tackett provided computer support for the project. Mr Hank Dubois, Occupational Survey Analyst, analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78150.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies may be obtained upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150.

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USAF Occupational Measurement Center

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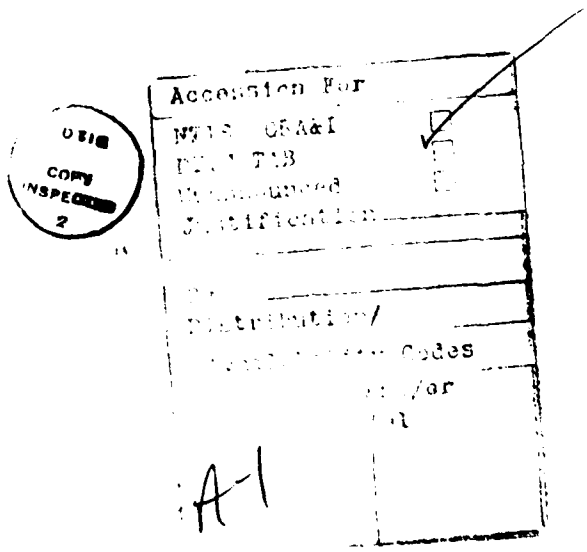

## SUMMARY OF RESULTS

1. Survey Coverage: Job inventory booklets were administered to Electronic Computer and Switching Systems (AFS 305X4) personnel worldwide. Survey results are based on the responses of 1,923 incumbents (60 percent of the assigned personnel). All commands were well represented, with AFCC and TAC making up 79 percent of the sample.

2. Specialty Jobs: The study identified 3 clusters, covering 21 job types, and 13 independent job types grouped into 3 general functional areas: (1) Electronic Computer and Switching Systems (ECSS) Maintenance; (2) Management Staff; and (3) Training. Within the ECSS functional area, job groupings revolved around systems, subsystems, or peripheral equipment. Job groupings generally are consistent with the existing shredout structure.

3. Career Ladder Progression: The 3- and 5-skill level jobs were oriented highly toward technical maintenance and repair functions. Seven-skill level members, while still performing some maintenance tasks, spent the majority of their time (56 percent) in supervisory or administrative-type functions. DAFSC 30594 personnel were the higher level supervisors and managers in the field, performing very little time (less than 9 percent) on technical tasks.

4. AFR 39-1 Specialty Descriptions: Current descriptions were found complete and portrayed the jobs of the incumbents in general terms. All types of jobs in the career field are covered by some portion of the specialty description.

5. Experience Group Differences: As time in service increased, there was a corresponding increase in the performance of duties involving management, supervision, and administration. Job satisfaction indicators for first-enlistment 305X4 incumbents were slightly to somewhat higher than those for first-enlistment incumbents in other mission equipment maintenance career fields.

6. Training Analysis. The 305X4 STS was generally supported by survey data and appears to be an effective outline of tasks performed within the career field. Analysis of the eight basic course POIs revealed only a very few course blocks requiring review by subject-matter and training specialists due to low percent performing or training emphasis ratings. There were several tasks not matched to all POIs with a high percent of course graduates performing and high training emphasis ratings. The computer printouts of tasks not referenced to each of the POIs should be reviewed for possible course inclusion.

7. Implications: Despite the addition of shreds to the 3-skill level of the 305X4 career ladder and the merger of the 362X2 career field, the pattern of jobs has remained fairly stable for these personnel since last surveyed. The present classification system accurately describes the job structure identified in the study. Job satisfaction responses across the entire survey sample compare favorably to members of similar AFSs recently surveyed. While training documents are generally supported by survey data, a review of tasks high in first-term training emphasis and performance not presently identified in POIs is necessary.

# OCCUPATIONAL SURVEY REPORT
# ELECTRONIC COMPUTER AND SWITCHING SYSTEMS CAREER LADDER
# (AFSC 305X4)

## INTRODUCTION

This is an occupational survey report (OSR) of the Electronic Computer and Switching Systems career ladder (AFSCs 30534E/F/G/H/J/K/P/Q/R, 30554, 30574, and 30594) recently completed by the Occupational Analysis Branch, USAF Occupational Measurement Center. The survey was conducted in response to a request from Keesler Technical Training Center (KTTC) to evaluate training programs that had been revised due to changes in AFR 39-1 in October 1980. That change merged the Electronic Switching Systems Repair (AFS 362X2) career ladder with the Electronic Computer Systems (AFS 305X4) career ladder. The results of the last survey of the 362X2 career ladder were published in August 1975. Survey results for the 305X4 career ladder were last published in December 1977. Both ladders were subjects of Electronic Principles OSRs published in September 1977.

### Background

The 305X4 career ladder was created in 1971 from the 305X1 Electronic Digital Processing Systems Repairman and the 305X3 Electronic Computer Repairman specialties. Originally, the career ladder title was Electronic Computer Systems. Although this title remained with the career ladder until the 1980 merger with 362X2 Electronic Switching Systems ladder, there were several classification changes involving the addition or deletion of shredouts identifying equipment manufacturers and/or specific equipment. The 362X2 career ladder, which was deleted at the time of the 1980 merger with 305X4, was created in 1965 from the 306X0A Communications and Cryptographic Equipment Systems, Automatic Teletype specialty. Figure 1 depicts the evolution of the 305X4 career ladder through the date of this report. It should be noted the specialty shredouts in this report relate only to 3-skill level. This ladder is under the Chief Enlisted Manager (CEM) Code 30100, Communications-Electronics Systems Manager, which is not part of this report.

As described in AFR 39-1 Specialty Descriptions, personnel in the 305X4 career ladder are responsible for inspecting, installing, troubleshooting, repairing, overhauling, and modifying high-speed, general-purpose and special electronic computer and switching systems, including transmission, processing, and display equipment. Primary entry into the career ladder is from Basic Military Training School (BMTS), then through one of eight Category A resident training courses. There is no resident training for the "J" shred, as the Federal Aviation Administration (FAA) is taking over maintenance of the AN/FYQ-47, an air data processor. The course location and course length for each shred is as follows:

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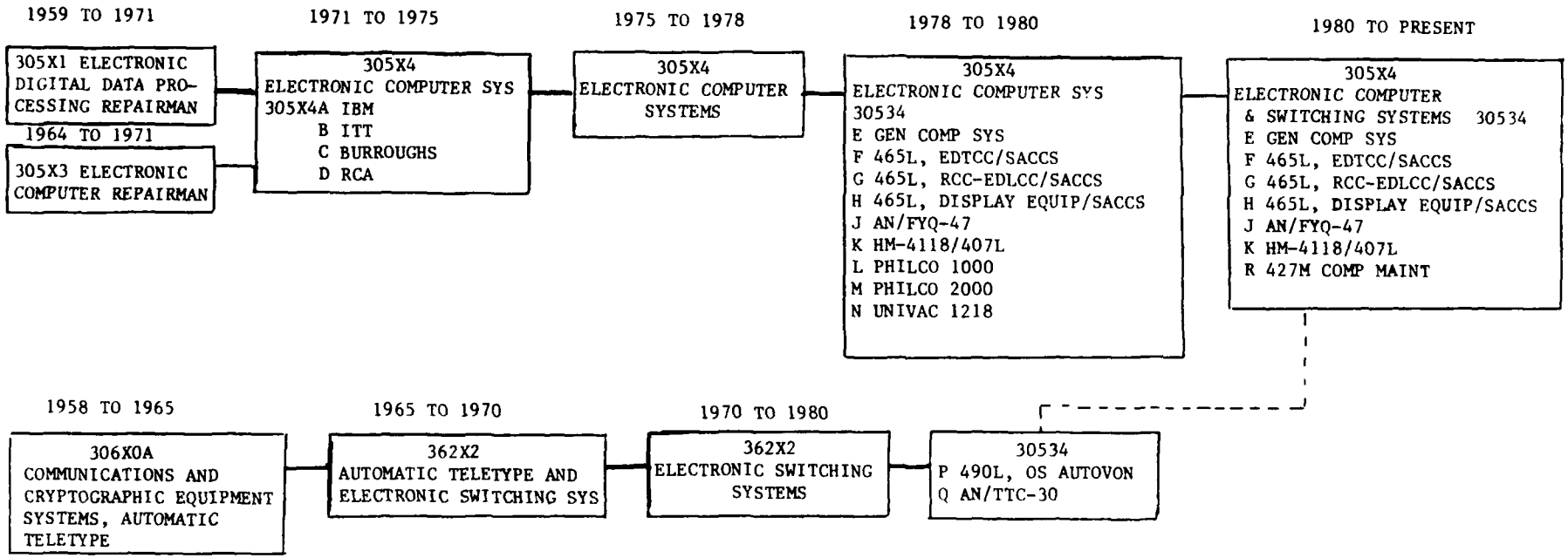
| SHRED | SYSTEM | LOCATION | LENGTH |
|---|---|---|---|
| E | GEN COMPUTER SYSTEM | KEESLER TTC MS | 153 DAYS |
| F | 465L, EDTCC, SACCS | KEESLER TTC MS | 144 DAYS |
| G | 465L, RCC-EDLCC/SACCS | KEESLER TTC MS | 118 DAYS |
| H | 465L, DISPLAY EQUIP/SAACS | KEESLER TTC MS | 116 DAYS |
| K | HM-4118/407L | KEESLER TTCMS | 173 DAYS |
| P | 490L OVERSEAS AUTOVON | SHEPPARD TTC TX | 155 DAYS |
| Q | AN/TTC-30 ELECT SWITCHING SYS | SHEPPARD TTC TX | 134 DAYS |
| R | 427M COMP MAINT | PETERSON AFB CO (FTD) | 95 DAYS |

FIGURE 1

ELECTRONIC COMPUTER AND SWITCHING SYSTEMS CLASSIFICATION CHANGES



## SURVEY METHODOLOGY

### Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-305-488, dated April 1982. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, tasks from previous survey instruments for both AFSC 305X4 and AFSC 362X2, and data from the last OSR for those career ladders. The task list was then evaluated in the field through personal interviews with 47 subject-matter specialists from 9 bases. The resulting job inventory contained a comprehensive listing of 843 tasks grouped under 25 duty headings and a background section containing such information as grade, duty title, major command, time in service, job satisfaction, and electronic computer or switching systems approved.

### Survey Administration

From August 1982 through January 1983, Consolidated Base Personnel Offices (CBPO) in operational units worldwide administered the inventory to job incumbents holding DAFS 305X4. These job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL).

Each individual who completed the inventory first completed an identification and background section and then checked each task performed in their current job. After checking all tasks performed, each member then rated each of these tasks on a 9-point scale showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from one (very small amount of time spent) through five (about average time spent) to nine (very large amount time spent).

To determine relative time spent for each task checked by a respondent, all of an incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

### Survey Sample

Personnel were selected to participate in this survey to ensure an accurate representation across major commands (MAJCOM) and paygrade groups. All eligible DAFS 305X4 personnel were mailed survey booklets. Table 1 shows the percentage distribution, by major command, of assigned personnel in the career ladder as of September 1981. Also listed in this table is the percentage distribution, by MAJCOM, of respondents in the final survey sample. The 1,923 respondents included in the final sample represent 74 percent of the 305X4 career ladder personnel eligible for the survey.

Table 2 reflects the paygrade group distribution, while Table 3 lists the sample distribution by TAFMS groups. As reflected in these tables, the survey sample provides a very good representation of the career ladder population.

TABLE 1

COMMAND REPRESENTATION OF SURVEY SAMPLE

| COMMAND | PERCENT OF ASSIGNED | PERCENT OF SAMPLE |
|---|---|---|
| AFCC | 56 | 58 |
| TAC | 22 | 21 |
| ATC | 9 | 6 |
| ESC | 5 | 4 |
| USAFE | 5 | 4 |
| SAC | 1 | 3 |
| PACAF | 1 | 1 |
| OTHER | 1 | 3 |
| TOTALS | 100 | 100 |

Total 305X4 Personnel Assigned - 3,212
Total 305X4 Personnel Eligible - 2,614
Total 305X4 Personnel Sampled - 1,923
Percent of Assigned 305X4 Personnel Sampled - 59%
Percent of Eligible 305X4 Personnel Sampled - 74%

NOTE: Manning figures as of September 1982

TABLE 2

PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

| PAYGRADE | PERCENT OF ASSIGNED | PERCENT OF SAMPLE |
|---|---|---|
| AIRMAN | 20 | 23 |
| E-4 | 28 | 26 |
| E-5 | 26 | 24 |
| E-6 | 14 | 15 |
| E-7 | 10 | 10 |
| E-8 | 2 | 2 |
| TOTALS | 100 | 100 |

NOTE: CEM Code 30100 personnel were not surveyed; therefore, E-9 data are not presented.

TABLE 3

TAFMS DISTRIBUTION OF SURVEY SAMPLE

| | MONTHS TOTAL ACTIVE FEDERAL MILITARY SERVICE (TAFMS) | | | | | |
|---|---|---|---|---|---|---|
| | 1-48 | 49-96 | 97-144 | 145-192 | 193-240 | 241+ |
| PERCENT OF ASSIGNED | 31% | 30% | 12% | 10% | 12% | 5% |
| PERCENT OF SAMPLE | 38% | 23% | 12% | 11% | 13% | 3% |
| NUMBER IN SAMPLE | 738 | 445 | 231 | 212 | 250 | 47 |

NOTE: Manning figures as of September 1982

## Task Factor Administration

In addition to completing the job inventory, selected senior 305X4 personnel were also tasked to complete a second booklet for either task difficulty (TD) or training emphasis (TE). The TD and TE booklets are processed separately from the job inventories. The rating information is used in several analyses discussed in this report. Table 4 reflects the MAJCOM representation for the TD and TE raters.

Task Difficulty. Each person completing a task difficulty booklet was asked to rate all inventory tasks on a 9-point scale (from extremely low to extremely high) as to relative difficulty of each task. Difficulty is defined as the length of time required by an average incumbent to learn to do the task. Task difficulty data were independently collected from 99 experienced 7- or 9-skill level 305X4 personnel stationed worldwide. The interrater reliability (as assessed through components of variance of standard group means) was .96, which reflects a high agreement among the raters. Ratings were adjusted so tasks of average difficulty would have a 5.0 rating and a standard deviation of 1.0. The resulting data are essentially a rank ordering of tasks, indicating the degree of difficulty for each task in the inventory.

Job Difficulty Index (JDI). After determining the task difficulty index for each task item, a Job Difficulty Index (JDI) was computed for the job groups identified in the survey analysis. The JDI provides a relative measure of which jobs, in comparision to other jobs, are more or less difficult. An equation using the number of tasks performed and the average difficulty per unit time spent (ADPUTS) as variables is the basis for the JDI. Thus, the more time a group spends on difficult tasks and the more tasks they perform, the higher the JDI. The index ranges from 1.0 for very easy jobs to 25.0 for very difficult jobs. The measurements are adjusted so the average JDI is 13.0.

Training Emphasis. Individuals completing training emphasis booklets were asked to rate tasks on a 10-point scale from no training required to extremely heavy training required. Training emphasis is a rating of which tasks require structured training for first-term personnel. Structured training is defined as training provided at resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal OJT, or any other organized training method. Training emphasis data were independently collected from 209 experienced 7- and 9-skill level 305X4 personnel stationed worldwide. These raters were also asked to indicate the computer or switching systems they maintained or supported. A review of those responses indicates the rater's system experience is very similar to that of the entire survey sample. For example, 17 percent of the raters indicated association with the Overseas AUTOVON (P-shred) versus 18 percent of the total 305X4 sample, indicating excellent balance between the raters and the total sample. Several sets of training emphasis data were analyzed. These included training emphasis data as rated by all the raters combined (209 members) and for groups of raters developed from 3-level shred specific equipment they maintained or supported. While the interrater reliability of the overall group (as assessed through components of variance of standard group means) was

.98, indicating a very high degree of agreement, a task-by-task review of ratings across equipment experience groups indicated there are differences in training policies among the groups. Therefore, the TRAINING ANALYSIS section of this report utilizes training emphasis ratings developed on rater equipment experience.

When used in conjunction with other factors, such as percent members performing, the task difficulty and training emphasis ratings can provide an insight into training requirements. This may help validate the lengthening or shortening of specific units of instruction in various training programs.

TABLE 4

COMMAND REPRESENTATION OF 305X4 TASK DIFFICULTY AND TRAINING EMPHASIS RATERS

| COMMAND | PERCENT OF 7-LEVELS ASSIGNED | PERCENT OF TASK DIFFICULTY RATERS | PERCENT OF TRAINING EMPHASIS RATERS |
|---|---|---|---|
| AFCC | 48 | 21 | 57 |
| TAC | 23 | 19 | 24 |
| ATC | 10 | 27 | 2 |
| USAFE | 7 | 6 | 5 |
| ESC | 4 | 15 | 4 |
| AFSC | 3 | 2 | 2 |
| SAC | 2 | 4 | 2 |
| PACAF | 1 | - | 1 |
| OTHER | 2 | 6 | 3 |
| TOTALS | 100 | 100 | 100 |

## SPECIALTY JOBS
## (Career Ladder Structure)

A key aspect of the USAF Occupational Analysis program is to examine the structure of the career ladders--what people are actually doing in the field, rather than how official career field documents say they are organized. This analysis of actual jobs performed is made possible by the use of the Comprehensive Occupational Data Analysis Program (CODAP) and is based on incumbent task responses. Each person in the survey performs a set of tasks called their position. A group of positions where many similar tasks are performed and incumbents spend similar amounts of time performing them is called a Job Type. Job types having a substantial degree of similarity are grouped and called a Cluster. Specialized job types too dissimilar to fit within a cluster are labeled Independent Job Types. This job information is used to examine the accuracy and completeness of career ladder documents (AFR 39-1 Specialty Descriptions and Specialty Training Standards) and to formulate an understanding of current utilization patterns.

Based on task similarity and relative percent time spent, the best division of jobs performed in the 305X4 career ladder is illustrated in Figure 2. These clusters, job types, and independent job types are listed below. The group (GRP) number shown beside each title is a reference to computer printed information. The letter N refers to the number of personnel in the group.

### ELECTRONIC COMPUTER AND SWITCHING SYSTEMS (ECSS) MAINTENANCE FUNCTIONAL AREA

I. ECSS SHIFT SUPERVISORS (GRP242, N=86)

II. ELECTRONIC COMPUTER SYSTEMS MAINTENANCE PERSONNEL CLUSTER (GRP259, N=493)

- A. Tactical Interpretation Systems Repair Specialists (GRP576, N=25)
- B. Intermediate Computer Maintenance Specialists (GRP748, N=89)
- C. Mainframe Processor-Disc Systems Specialists (GRP725, N=104)
- D. Tactical Air Control Systems Repair Specialists (GRP746, N=26)
- E. Air Defense Systems Repair Specialists (GRP649, N=53)
- F. Airborne Warning and Control System (AWACS) Repair Specialists (GRP464, N=55)
- G. 427M-Cheyenne Mountain Complex Technicians (GRP511, N=28)
- H. Ground Development and Digital TV Systems Specialists (GRP523, N=6)

I. Card Punch/Card Reader Equipment Repairmen (GRP347, N=10)
J. Computer Operator-Maintainers (GRP366, N=22)
K. Tape Punch/Tape Reader Equipment Repairmen (GRP285, N=28)

III. AIRBORNE COMMAND POST COMPUTER SPECIALISTS (GRP279, N=10)

IV. REMOTE COMMUNICATION CENTRAL (RCC)-ELECTRONIC DATA LOCAL COMMUNICATION CENTRAL (EDLCC)/SACCS SPECIALISTS (GRP208, N=242)

V. ELECTRONIC DATA TRANSMISSION CONTROL CENTER (EDTCC)/SACCS SPECIALISTS (GRP196, N=64)

VI. COMPUTER ASSISTED FORCE MANAGEMENT SYSTEM (CAFMS) SPECIALISTS (GRP220, N=5)

VII. GENERAL COMPUTER MAINTENANCE SPECIALISTS (GRP132, N=24)

VIII. SEMI-AUTOMATIC GROUND ENVIRONMENT (SAGE) SPECIALISTS (GRP110, N=87)

IX. DATA DISPLAY CENTRAL (DDC)/SACCS SPECIALISTS (GRP205, N=36)

X. AIRBORNE AWACS TECHNICIANS (GRP300, N=10)

XI. FIELD TRAINING INSTRUCTORS (GRP105, N=15)

XII. ELECTRONIC SWITCHING SYSTEMS MAINTENANCE CLUSTER (GRP079, N=204)

A. Overseas AUTOVON Switch Repair Specialists (GRP104, N=103)
B. Tactical Control Switch Repairmen (GRP125, N=101)

XIII. GENERAL FACILITY MAINTENANCE SPECIALISTS (GRP069, N=78)

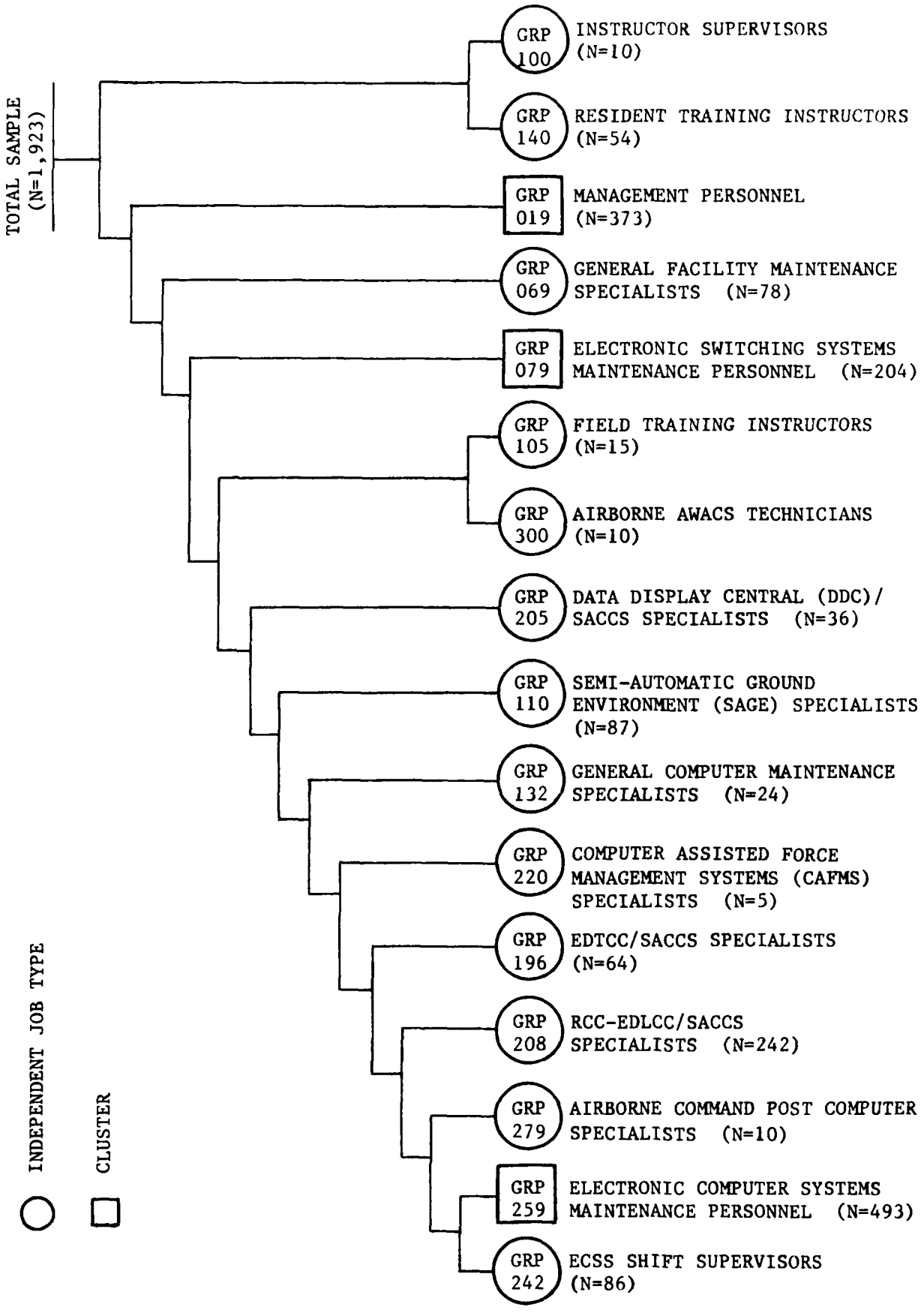
## MANAGEMENT STAFF FUNCTIONAL AREA

XIV. MANAGEMENT PERSONNEL CLUSTER (GRP019, N=373)

A. Quality Control Inspectors (GRP090, N=44)
B. Maintenance Workcenter NCOICs (GRP324, N=125)
C. Maintenance Controllers (GRP297, N=20)
D. Program Managers (GRP111, N=25)
E. Headquarters Administrative Staff Personnel (GRP96, N=34)
F. Supply Monitors (GRP33, N=13)
G. Job Controllers (GRP193, N=30)
H. Systems Controllers (GRP56, N=19)

FIGURE 2

305X4 CAREER LADDER STRUCTURE



## TRAINING FUNCTIONAL AREA

XV. RESIDENT TRAINING INSTRUCTORS (GRP140, N=54)

XVI. INSTRUCTOR SUPERVISORS (GRP100, N=10)

Ninety-three percent of the respondents in the sample perform jobs generally equivalent to the 3 clusters and 13 independent job types listed above. The remaining 7 percent were performing tasks or series of tasks that did not group with any of the defined job types. Some of the job titles given by respondents which were representative of these personnel included Inspector Trainee, Switching Systems Engineer, Test Equipment Calibration, Repairman, and IBM PCAM Repairman.

### Group Descriptions

The following paragraphs contain brief job descriptions of the clusters and independent job types identified through the career ladder structure analysis. Selected background and job satisfaction data are provided for these groups in Tables 5 and 6. Representative tasks for all clusters (as well as job types within clusters) and independent job types are contained in Appendix A.

## ELECTRONIC COMPUTER AND SWITCHING (ECSS) MAINTENANCE FUNCTIONAL AREA

I. ELECTRONIC COMPUTER AND SWITCHING SYSTEMS SHIFT SUPERVISORS (GRP242, N=86). The experienced personnel (incumbents average 143 months TAFMS) in this group perform a combination of routine maintenance and supervisory functions. These respondents identified themselves as shift, shop, or crew chiefs or NCOICs and had an average grade of between E-5 and E-6. Representative tasks for this independent job type are:

determine work priorities
interpret policies, directives, or procedures for subordinates
counsel personnel on personal or military-related matters
conduct OJT
research manuals for part numbers
remove or replace electronic circuit cards or printed circuit boards
prepare airman performance reports

This group performs an average of 258 tasks and has the highest job difficulty (Job Difficulty Index = 19.6) of any cluster or independent job type. This reflects the very broad scope of their job, which adds supervisory responsibilities to a full range of technical tasks. Their technical tasks are the same as the following cluster. Sixty-one percent of these respondents hold the 7-skill level DAFSC. Eighty-four percent report supervising an average of three personnel. Eighty percent of the respondents perceived their jobs as interesting; 88 percent reported their talents were well utilized, with 84 percent believing their training was well utilized. Sixty-two percent indicated positive reenlistment intentions.

II. ELECTRONIC COMPUTER SYSTEMS MAINTENANCE PERSONNEL CLUSTER (GRP259, N=493). The members making up the Electronic Computer Systems Maintenance Personnel Cluster comprise 26 percent of the total survey sample. These personnel are primarily involved with maintaining various different electronic computer systems and related equipment. Seventy-three percent of the 3-skill level personnel in the cluster have a duty AFSC of 30534E (General Computer Systems), reflecting the broad inventory of systems maintained by these personnel (see Tables 8A and 8B). Tasks performed by these respondents averaged 176 tasks or 21 percent of the 843 tasks in the survey booklet. Examples of thse tasks include:

replace minor electrical hardware
remove or replace filters
isolate malfunctions to printers
clean read/write heads
solder or desolder electronic equipment using soldering irons
interpret program printouts for fault isolation
interpret block diagrams for fault isolation
isolate malfunctions to power supplies
perform mechanical alignment of printers
interpret results of memory diagnostic programs

The majority of these personnel (58 percent) were 5-skill level airmen, with 67 percent of the cluster in their second or subsequent enlistment, averaging 86 months TAFMS. Command distribution of this group reflected that the majority of these members were assigned to either AFCC (52 percent) or TAC (28 percent). The average grade of these incumbents was between E-4 and E-5, with 44 percent of the group supervising an average of 2.4 personnel.

Job satisfaction responses for this group indicate 79 percent of this journeyman cluster found their jobs interesting and 57 percent indicated favorable reenlistment intentions. Eighty-six percent of these members perceived their talents were being fairly well to perfectly utilized and 83 percent reported the same perception of their training utilization.

Within this rather large cluster, there were 11 subgroups or job types identified. These job types are briefly discussed below and in Appendix A. The differentiating feature of these job types is, that, in addition to performing a full range of maintenance on electronic computer systems, they

perform tasks which indicate a degree of equipment specialization, such as working on keyboards, memory units, modems, or display units. To some degree, this specialization is attributable to major command or mission orientation of the incumbents. Table 8A reflects the various systems maintained by members of this cluster.

A. Tactical Interpretation Systems Repair Specialists (GRP576, N=25). The personnel in this group represent a number of commands: TAC (28 percent), ESC (20 percent), PACAF (20 percent), USAFE (16 percent), and ATC (12 percent). Seventy-two percent of these respondents maintain either AN/TYQ-11 or WS-428A, or both. Fifty-six percent of the personnel are assigned overseas, with 72 percent of the group belonging to tactical reconnaissance squadrons.

B. Intermediate Computer Maintenance Specialists (GRP748, N=89). As in the previous group, several commands are represented by these personnel: AFCC (33 percent), ESC (26 percent), TAC (24 percent), and USAFE (11 percent). Forty-four percent of these members maintain equipment not covered by the inventory. However, from 18 to 25 percent maintain a variety of tactical control computer systems, such as AN/TSQ-91, AN/TYC-10, and HM-4118/407L. This job is the broadest of those in the cluster, with members performing an average of 245 tasks and a 21.5 JDI. They perform tasks across all computer maintenance duty areas with a significant number (12 percent) performing depot type maintenance.

C. Mainframe Processor-Disc Systems Specialists (GRP725, N=104). Ninety-one percent of these members are assigned to AFCC, with 41 percent of the group overseas. Systems maintained by this group include SAC Satellite Tracking, Overseas AUTODIN, 472M (NORAD), and Streamliner communications.

D. Tactical Air Control Systems Repair Specialists (GRP746, N=26). Every member of this group performs maintenance on one or more of the following systems: AN/TSQ-91, AN/TYC-10, HM-4118/407L. This group represents the K-shred (HM-4118/407L) personnel of the career ladder. Tasks unique to this group involve the maintenance of modems. These members are assigned to one of three commands: TAC (58 percent), USAFE (31 percent), or AFCC (11 percent). Thirty-five percent are assigned overseas.

E. Air Defense Systems Repair Specialists (GRP649, N=53). The majority of these respondents are assigned to TAC air defense squadrons (60 percent) with another 34 percent assigned to AFCC in support of the Air Defense Weapons Center. The systems maintained are AN/FYQ-7 (SAGE) and radar course directing equipment. Differentiating tasks for this group are those pertaining to the maintenance of magnetic drum units.

F. Airborne Warning and Control Systems (AWACS) Repair Specialists (GRP464, N=55). Ninety-eight percent of this group are assigned to TAC component repair or AWACS squadrons. Their job is in-shop maintenance of E-3A AWACS equipment.

G. 472M-Cheyenne Mountain Complex Technicians (GRP511, N=28). Seventy-five percent of the 3-skill level personnel in this group possess a duty AFSC of 30534R (427M Computer Maintenance), with 17 of the 28 members having completed R-shred training. Tasks unique to this group involve maintenance of mini- or micro-processors as opposed to main frame processors. This group includes three respondents who maintain photo interpretation equipment, while spending relatively the same amount of time on the same tasks performed by the 427M technicians.

H. Ground Development and Digital TV Systems Specialists (GRP523, N=6). While performing tasks across all technical duty areas, this group spends 12 percent of its time on maintenance of display equipment, such as liquid crystal light valves and plasma display equipment. The members of this group are assigned to AFCC and maintain both the AN/GYQ-18 and AN/UYK-47, systems unique to SAC.

I. Card Punch/Card Reader Equipment Repairmen (GRP347, N=10). Personnel from this group are predominantly from AFCC (80 percent) and are assigned to nine locations. Fourteen percent of their time is spent on maintenance of card punch or card reader equipment, which is more than any other job type in the cluster.

J. Computer Operator-Maintainers (GRP366, N=22). These personnel are assigned to one of three commands: AFCC (86 percent), ESC (9 percent), and AFLC (5 percent). Sixty percent of these respondents indicate they operate and maintain Defense Dissemination System (DDS) equipment. This group averages 9 years service, with 59 percent of the group indicating intent to reenlist. Job interest, however, is very low, with 41 percent reporting their job to be dull. Forty-six percent feel talents are being used little or not all, and a majority (59 percent) have the same perception of their training utilization.

K. Tape Punch/Tape Reader Equipment Repairmen (GRP285, N=28). The majority of this group are assigned to either AFCC (68 percent) or SAC (18 percent). This group spends 16 percent of their time performing maintenance on tape punch and tape reader equipment. Seventy-five percent reported this maintenance was in support of systems not listed in the background section of the survey. This group felt their talents were being well utilized; however, 32 percent reported their jobs to be less than interesting. Thirty-two percent also perceived their training to be of little or no use at all. Fifty percent of these respondents indicated they would not reenlist.

III. AIRBORNE COMMAND POST COMPUTER SPECIALISTS (GRP279, N=10). The members of this group are all assigned to SAC, with 50 percent performing duties requiring aerial flight. They have an average grade of 5.1 and average 103 months TAFMS. These personnel maintain the Post Attack Command Control System (PACCS) and the AN/UYK-47 Ground Development System (see Table 8A). Some representative tasks from the average of 188 tasks performed by this group are:

remove or replace airborne command post LRUs
load programs using magnetic tapes
bench check cartridge or cassette magnetic tape units
remove or replace integrated circuit components
isolate malfunctions to plasma display equipment
align cartridge or cassette magnetic tape units

This group has a job difficulty index (JDI) of 18.7 (the adjusted average for the entire sample is 13.0), which suggests this is a rather difficult job. Ninety percent of this group found their job interesting and perceived their talents to be used fairly well to perfectly. Thirty percent, however, perceived their training to be used little or not at all. Sixty percent of the members indicated favorable reenlistment intentions, while 20 percent reported they would retire during or at the end of their current enlistment.

IV. REMOTE COMMUNICATION CENTRAL (RCC) - ELECTRONIC DATA LOCAL COMMUNICATION CENTRAL (EDLCC)/SACCS SPECIALISTS (GRP208, N=242). This group is the largest independent job type of the study (13 percent of the total sample). The majority (93 percent) of the members are 3- and 5-skill level personnel with an average grade slightly below E-4 (3.8). Ninety-one percent of the 3-skill level personnel have a DAFSC suffix of G (465L, RCC-EDLCC/SACCS). They perform an average of 125 tasks and have a JDI of 14.2, which reflects a slightly above average job difficulty. Their average time in the career field is 33 months, while 66 percent of the group are in their first enlistment. Ninety-two percent of the members are assigned to AFCC; however, all of these are assigned to SAC bases or bases with SAC tenants. Table 8A reflects that 89 percent maintain the remote control centrals (RCC) for the SAC basic 465L command control systems. Tasks they perform include:

align format message composers (FMC)
perform preventive maintenance inspections on FMCs
perform self-test procedures on drawer testers
isolate malfunctions to FMCs
replace minor electrical hardware
remove or replace discrete circuit components
remove or replace modems

Reenlistment intentions (46 percent favorable) for this somewhat young group are slightly higher than those of all first-enlistment personnel in the career ladder (42 percent). Table 6 reflects expressed job interest and perceived utilization of talents and training are about average considering the experience level of this group.

V. ELECTRONIC DATA TRANSMISSION CONTROL CENTER (EDTCC)/ SACCS SPECIALISTS (GRP196, N=64). This group, like the previous independent job type, has a mission of SAC support. Seventy-seven percent of

these members maintain the electronic data transmission control center (EDTCC) equipment of the 465L command control system, representing the F-shred job. Typical tasks include:

load programs using cards
isolate malfunctions within modems to component
align reel-to-reel magnetic tape units
remove or replace integrated circuit components
perform PMIs on reel-to-reel magnetic tape units

The majority of these personnel possess a DAFSC of 30554 (47 percent) or 30534F (41 percent). As their skill levels reflect, this is a somewhat junior group, averaging 29 months time in the career field (TICF) and 42 months TAFMS. Their average grade is 3.5. The scope of their job is less than the previous group of SAC support personnel, averaging only 92 tasks and a JDI of 12.4, which is about average for the career field as a whole.

As seen in Table 6, perceived utilization of talents and training is somewhat high for this group (only the FTD Instructors exceeding them in both areas).

VI. COMPUTER ASSISTED FORCE MANAGEMENT SYSTEM (CAFMS) SPECIALISTS (GRP220, N=5). This small group of TAC personnel are assigned to tactical air control center squadrons. Typical tasks for this group include:

operate keyboards other than for airborne systems
fabricate or modify cable installations
coordinate computer system functional requirements with users
load programs using floppy discs
remove or replace modems

Four of these five respondents are in their second or subsequent enlistment and have an average grade slightly less than E-5. They perform an average of 155 tasks with a 17.9 JDI, which reflects an above average difficulty for this job.

Job satisfaction indicators are very high for this group, with the exception of perceived utilization of training. Forty percent (two members) responded their training was used little or not at all (see Table 6).

VII. GENERAL COMPUTER SYSTEMS MAINTENANCE SPECIALISTS (GRP132, N=24). The members of this group perform a relatively small number of tasks (76) with a corresponding 9.8 JDI. The tasks are related to general or routine maintenance, such as:

clean or treat filters
perform general cleaning of electronic computer or switching systems equipment
clean read/write heads
replace minor electrical hardware
remove or replace filters

Eighty-eight percent of the group possess a DAFSC at the 3- or 5-skill level. The average time in the career ladder for these incumbents is 41 months and their average grade is 3.9.

Job satisfaction indicators for these members are somewhat lower than most groups reported. Their job interest (75 percent interesting) and favorable reenlistment intent (58 percent) are as good or better than that reported for all first enlistment personnel in the career ladder.

VIII. SEMI-AUTOMATIC GROUND ENVIRONMENT (SAGE) SPECIALISTS (GRP110, N=87). Seventy-nine percent of these respondents are assigned to TAC with another 17 percent assigned to AFCC. They have an average of 36 months in the career field, with 58 percent in their first enlistment. Forty-four percent have a DAFSC of 30534E and 46 percent possess the 5-skill level. With a JDI of 11.5, they are performing an average of 84 tasks. Included in these are:

load programs using cards
align cathode ray tube (CRT) display equipment
align consoles
perform operational checks of CRT display equipment
isolate malfunctions to CRT display equipment
load programs using magnetic drums

Ninety percent of the group members felt their talents were utilized effectively, 84 percent perceived proper use of their training, and 82 percent reported their jobs interesting. Favorable reenlistment intentions were reported by 49 percent of all the members of this group.

IX. DATA DISPLAY CENTRAL (DDC)/SACCS SPECIALISTS (GRP205, N=36). Ninety-seven percent of this group maintain data display equipment associated with the SAC 465L command control system representative of the H-shred (see Table 8C). Seventy-five percent of these personnel are in their first enlistment. They perform an average of 84 tasks with an 11.1 JDI. Typical tasks include:

align fluid distribution systems
perform PMIs on fluid distribution systems
align projection display equipment

operate dispaly equipment other than for airborne systems
isolate malfunctions within fluid distribution systems
align CRT display equipment

The experience level of this group is the lowest reported in the survey sample. They average 23 months in the career field and 38 months time in service, with an average grade between E-3 and E-4. The majority of these members are assigned to AFCC (92 percent), with 6 percent assigned to SAC.

This group, across all job satisfaction indicators, expresses the least satisfaction with their job than any other group in the survey (see Table 6). Only 47 percent feel their job is interesting. The same number perceive their training to be of little or no use. Sixty-two percent of these personnel have been in their present job for 24 months or less. Overall, the group spends 50 percent of their time on 43 tasks. This job is somewhat narrow in that of these tasks, 42 percent are related to display equipment maintenance and 35 percent related to routine minor maintenance.

X. AIRBORNE AWACS TECHNICIANS (GRP300, N=10). These 10 members are all assigned to positions requiring aerial flight on Airborne Warning and Control System aircraft (E-3A). Sixty percent were found to be at overseas locations. Typical tasks include:

operate AWACS data processing systems
preflight AWACS communication and data processing equipment
perform aircraft preflight inspections
detect faults within AWACS interface equipment
perform operational checks of AWACS built-in test equipment
load and operate CPUs with operational programs

This highly experienced group (70 percent are 7-skill level personnel) have an average grade of slightly over E-6 and average 150 months in the career field. They have an above average difficulty job (JDI = 14.9) and perform an average of 103 tasks.

Although 70 percent of this group find their job interesting and their reenlistment intentions are high (80 percent), 40 percent (4 members) feel their talents and training are used only a little or not at all. This highly experienced group of technicians spends a considerable amount of time on operating, preflighting, performing operational checks, and detecting system faults. They are not deeply involved in either organizational or intermediate maintenance tasks--those tasks for which they have received extensive training.

XI. INTERMEDIATE AND FTD INSTRUCTORS (GRP105, N=15). As indicated by their job title, these ATC instructors train personnel in intermediate, advanced, or unique systems maintenance. Differentiating tasks for this group include:

conduct classroom training other than for OJT
write test questions
prepare lesson plans
load and operate CPUs with diagnostic programs
load programs using keyboards
evaluate resident course student progress

The majority (73 percent) of these personnel have a DAFSC of T30574. Their average grade is E-6 and they have an average of 129 months TICF. This group performs an average of 98 tasks with a JDI of 15.2, which is much higher than that of the basic course instructors to be discussed later.

Job satisfaction responses for this group are very favorable, with 67 percent indicating they plan to reenlist and 13 percent planning to retire.

XII. ELECTRONIC SWITCHING SYSTEMS MAINTENANCE PERSONNEL CLUSTER (GRP79, N=204). This cluster represents those technical jobs formerly the responsibility of the 362X2 career ladder, which merged with the 305X4 ladder in 1980. This cluster constitutes 11 percent of the total sample. With 61 percent of these members in their first enlistment, the member's experience level is somewhat lower (averaging 35 months in the career field and 58 months in the service) than that of the Computer Systems Maintenance Cluster (GRP259). The cluster is composed of two job types, one responsible for 490L Overseas AUTOVON and related systems maintenance, the other for maintenance of various transportable telephone center systems.

A. Overseas AUTOVON Switch Repair Specialists (GRP104, N=103). The majority of these members are assigned to AFCC (85 percent) worldwide, with another 8 percent to PACAF. Eighty percent of the total group are assigned overseas, with CONUS personnel assigned to special activities. These incumbents perform an average of 100 tasks; typical tasks include:

perform PMIs on AUTOVON subsystems
interpret program printouts for fault isolation
adjust line or trunk circuits
detect faults within trunk scanner circuits
check battery cell voltage
load programs using keyboards

Thirty-six percent of this group possess a DAFSC of 30534P (490L, OS AUTOVON) and 51 percent have a DAFSC of 30554, while the average grade is 3.8.

Eighty-three percent find their job interesting and 52 percent indicate they plan to reenlist. Eighty-nine percent find their talents and training fairly well to perfectly utilized.

B. Tactical Control Switch Repairmen (GRP125, N=101). Ninety-five percent of these respondents are assigned to one of three commands: TAC (46 percent), AFCC (33 percent), and USAFE (16 percent). Twenty-eight percent of the group are assigned overseas. This group performs an average of 130 tasks. Examples of these tasks are:

perform operational checks of TA-341/TT telephones
remove or replace TA-341/TT telephones
detect faults within register circuits
remove or replace batteries
perform PMIs on mobile electronic switching equipment
replace minor electrical hardware

Fifty percent of these personnel have a 5-skill level DAFSC, while 36 percent have a DAFSC of 30534Q. The AN/TTC-30 Electronic Switching System, Q-shred equipment, is maintained by over 83 percent of the entire group.

Job satisfaction responses reflect 68 percent find their job interesting and 50 percent indicate favorable reenlistment intent. Perceived utilization of talents and training were rated as fairly well to perfectly utilized by 83 percent and 82 percent, respectively.

XIII. GENERAL FACILITY MAINTENANCE SPECIALISTS (GRP69, N=78). Forty-seven percent of this group have a DAFSC at the 3-skill level. They average 32 months in the career field. These members spend 54 percent of their time performing routine maintenance and another 14 percent performing administrative and support functions. The group has a very limited job scope, performing an average of 40 tasks (a 5.2 JDI, the lowest difficulty index of any job reported). Typical tasks include:

interpret logic or schematic diagrams for fault isolation
solder or desolder electronic equipment using soldering irons
perform general cleaning of ECSS equipment
replace minor electrical hardware
research manuals for parts numbers
make entries on AFTO Forms 349 (Maintenance Data Collection Record)

Forty-nine percent of the incumbents indicated they spent most of their time in a training atmosphere. Both perceived utilization of talents and training were rated fairly well to perfectly utilized by 80 percent or more of the group, while 51 percent had positive reenlistment intentions.

## MANAGEMENT STAFF FUNCTIONAL AREA

XIV. MANAGEMENT PERSONNEL CLUSTER (GRP19, N=373). This cluster accounts for 19 percent of the total survey sample and includes 8 separate job types. Fifty-nine percent of the group hold the 7-skill level DAFSC, with 13 percent reporting performance at the 9-skill level. Averaging over 9 years in the career field and over 14 years total service, this group has an average grade of E-6. Representative tasks of the average 65 tasks performed by this group include:

draft or write correspondence
participate in meetings, such as staff meetings, briefings, conferences, or workshops
interpret policies, directives, or procedures for subordinates
evaluate compliance with performance standards
determine work priorities
review equipment records
coordinate job requirements with other sections
orient newly assigned personnel

Seventy-one percent of the respondents reported their jobs were interesting and 49 percent indicated positive reenlistment intentions, while 31 percent of this more experienced group indicated they would retire at the end of their enlistment. Perceived utilization of talents was high at 73 percent, but only 55 percent reported their training to be fairly well to perfectly utilized. The eight job types are briefly discussed below, while representative tasks are listed in Appendix A.

A. Quality Control Inspectors (GRP90, N=44). Sixty-four percent of these airmen possess a DAFSC at the 7- or 9-skill level and the average grade for the job is E-6. Their average time in the career field is over 10 years, with an average of 14 years military service. Ninety-six percent of these members are distributed among AFCC (57 percent), TAC (27 percent), ESC (7 percent), and SAC (5 percent). Inspections, evaluations, and initiating or reviewing forms and reports are typical of types of activities of the incumbents.

B. Maintenance Workcenter NCOICs (GRP324, N=125). This is the largest job type in Management Staff Personnel cluster. This group of 7-skill level (74 percent) and 9-skill level (17 percent) personnel engage in supervising and managing either computer or switching systems equipment repair or support functions. Only 10 percent of their time is directed to maintenance type duties. Their average grade is slightly below E-7, with an average TICF of 10 years and TAFMS of 17 years. Ninety-four percent of the respondents supervise an average of 5.4 personnel. The difficulty of this job is the highest within the cluster; however, at 12.6, it is slightly below the average of 13.0 for the entire sample.

C. Maintenance Controllers (GRP297, N=20). The members of this group are involved in planning, scheduling, and controlling maintenance workloads. Eighty-five percent of these personnel supervise an average of three airmen. Also, 85 percent are found in AFCC. They perform an average of 72 tasks. Typical tasks are:

advise personnel on equipment status,
issue job control numbers
dispatch maintenance personnel
coordinate job requirements with other sections

D. Program Managers (GRP111, N=25). Thirty-six percent of this group possesses a DAFSC at the 9-skill level, while the remainder are 7-skill level personnel. They perform such tasks as determine personnel or equipment requirements, plan equipment or facility maintenance requirements, and evaluate compliance with performance standards. They are assigned to a number of major command headquarters, intermediate headquarters, and special activities. They call themselves such things as data systems logistics manager, NCOIC of programs and mobility, assistant programs manager, and communication-electronics systems manager. This is the senior group within the Management Staff Personnel cluster, having an average grade slightly above E-7 and averaging 150 months in the career field and 222 months in the service.

E. Headquarters Administrative Staff Personnel (GRP96, N=34). This small group is somewhat similar to the previous group. They are senior personnel spending much of their time reviewing and writing correspondence, compiling information, and participating in meetings. They spend much less time in the evaluation function than do the Program Managers.

F. Supply Monitors (GRP33, N=13). Members of this group perform tasks involving surveillance of the supply activities which support maintained systems. Over 60 percent of their time is spent performing administrative and supply functions. Typical tasks include:

maintain supply control logs
research documents for parts information
maintain benchstock parts or equipment levels
verify monitor reports

G. Job Controllers (GRP193, N=30). This group performs an average of 20 tasks, which are all related to job control. They have an average grade between E-4 and E-5 and 73 percent possess a DAFSC of 30554. Typical tasks include:

initiate or review job control documents or master station logs
dispatch maintenance personnel
maintain status boards, graphs, or charts

H. Systems Controllers (GRP56, N=19). Most members of this group support either the 465L, SAC command control system, or the 427M, NORAD system. The group consists of 3-, 5-, and 7-skill level personnel having an average grade between E-4 and E-5. The group performs an average of only 17 tasks, while 50 percent of their job is spent on just 8 tasks. Twenty-six percent of their time is spent on operating or monitoring computer systems or related equipment, with 41 percent spent on records maintenance and other administrative and support functions.

## TRAINING PERSONNEL FUNCTIONAL AREA

XV. RESIDENT TRAINING INSTRUCTORS (GRP140, N=54). All but two members of this group are assigned to ATC. Ninety-one percent of the group possess a DAFSC at the 5- or 7-skill level. Their average grade is about E-5 and average time in the career field is 94 months. They perform an average of 28 tasks. Primary tasks performed are:

conduct classroom training
prepare lesson plans
administer tests
score tests
demonstrate how to locate technical information
counsel trainees on training progress

Ninety-one percent of the instructors perceived their talents and training to be fairly well to perfectly utilized. Seventy-eight percent indicated they found their jobs interesting and 70 percent planned to reenlist, while 13 percent indicated retirement intentions.

XVI. INSTRUCTOR SUPERVISORS (GRP100, N=10). These members, assigned to technical training centers, supervise an average grade of E-6 and all have a 7-skill level DAFSC. They have 112 months in the career field and 188 months in the service. They perform an average of 40 tasks. These supervisors spend a large amount of time in instruction-related activities; however, it is much less than that spent by the previous group. Differentiating tasks include:

assign course instructors
write test questions
evaluate instructor performance
prepare training schedules
evaluate training methods or techniques

Ninety percent of this group found their jobs interesting. Eighty percent found their talents and training effectively utilized. Fifty percent indicated intent to reenlist, while 40 percent plan retirement.

## Comparison of Specialty Jobs

In addition to identifying the functions of each job, it is useful to contrast the jobs in terms of background characteristics and job attitudes. Table 5 presents background data, such as average grade, DAFSC, average time in career field and service, and average number of tasks performed. Table 6 reflects data pertaining to job satisfaction indicators, including expressed job interest, perceived utilization of talents and training, and reenlistment intentions.

In most of the groups identified, members indicate a high amount of job interest, with 15 of the 16 groups showing over 70 percent of their members found their jobs interesting. The job of the group where less than 70 percent of the incumbents reported positive job interest--Data Display Central/ SACCS Specialists--has one of the lowest Job Difficulty Indexes (11.1) in the maintenance functional area and is somewhat limited in scope. This group performs an average 84 tasks compared to an average of 136 for the 13 groups that comprise the maintenance functional area. Table 7 reflects the high degree of specialization in this group, with 28 percent of their time dedicated to display equipment. Although this group represents less than 2 percent of the total sample, and less than 3 percent of the maintenance functional area, managers should note that this group has a significantly lower job interest than the other two SACCS groups.

Perceived utilization of talents and use of their training generally are very high, with only six groups having less than 70 percent responding positively in either indicator. Three of the groups had less than 70 percent positive responses for both use of their talents and use of training--the Data Display group (discussed above), the General Computer Systems Maintenance group, and the Airborne AWACS Technicians group. The 33 percent negative responses from the General Computer Systems Maintenance group may reflect the low job difficulty and scope of their job (a JDI of 5.2 and an average of 40 tasks performed by group members). The Airborne AWACS group (N=10) is a very specialized group of senior personnel (an average TAFMS of 176 months) with a very narrow job. The airborne nature of this job requires a considerable amount of time devoted to preflighting systems and "riding along" waiting for systems malfunctions as opposed to the shop maintenance performed by most of the other groups discussed.

Reenlistment intent varied from a high of 80 percent positive responses for two groups--Airborne AWACS and Computer Assisted Force Management Systems (CAFMS) groups--to a low of 42 percent for the SACCS Data Display group. Managers should note that all three of the SACCS groups (18 percent of the total sample) had less than 50 percent members indicating positive reenlistment intentions.

Survey respondents are encouraged to provide write-in comments in the job inventory booklets, and when there are serious problems in a career field, they usually will take the opportunity to discuss their perceptions. Only 35 airmen, less than 2 percent of the respondents, used the write-in

option to convey some type of information (e.g., additional systems maintained, other courses completed, or job titles used). No comments were provided to elaborate the relatively low job satisfaction expressed by any of the groups discussed above.

In summary, the career ladder structure suggests the present career ladder classification structure is working well. Equipment-oriented groups, including equipment formerly maintained by 362X2 personnel, are formed in consonance with the present classification structure, with 3-skill level shred personnel matched to the appropriate job groups. Job satisfaction responses indicate that individuals and training generally are well matched to the job characteristics of the career ladder. Those groups at the low end of the job satisfaction range perform limited or specialized jobs.

TABLE 5

SELECTED BACKGROUND DATA FOR CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES

| | ECSS SHIFT SUPERVISORS | ELECTRONIC COMPUTER SYSTEMS MAINTENANCE PERSONNEL | AIRBORNE COMMAND POST SPECIALISTS | RCC-EDLCC/ SACCS SPECIALISTS | EDTCC/ SACCS SPECIALISTS | CAFMS SPECIALISTS | GENERAL COMPUTER SYSTEMS MAINTENANCE SPECIALISTS | SAGE SPECIALISTS |
|---|---|---|---|---|---|---|---|---|
| NUMBER IN GROUP | 86 | 493 | 10 | 242 | 64 | 5 | 24 | 87 |
| PERCENT OF TOTAL SAMPLE | 4% | 26% | .5% | 13% | 3% | .3% | 1% | 5% |
| PERCENT IN CONUS | 55% | 71% | 100% | 94% | 97% | 100% | 83% | 97% |
| AVERAGE NUMBER TASKS PERFORMED | 258 | 176 | 188 | 125 | 92 | 155 | 76 | 84 |
| DAFSC DISTRIBUTION: | | | | | | | | |
| 30534 | 0% | 16% | 0% | 40% | 50% | 20% | 25% | 44% |
| 30554 | 38% | 58% | 80% | 53% | 47% | 60% | 63% | 46% |
| 30574 | 61% | 26% | 20% | 7% | 3% | 20% | 12% | 10% |
| 30594 | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| AVERAGE GRADE | 5.5 | 4.6 | 5.1 | 3.8 | 3.5 | 4.8 | 3.9 | 4.0 |
| AVERAGE MONTHS IN CAREER FIELD | 93 | 61 | 83 | 33 | 29 | 46 | 41 | 36 |
| AVERAGE MONTHS IN SERVICE | 143 | 86 | 103 | 49 | 42 | 87 | 64 | 59 |
| PERCENT IN FIRST ENLISTMENT | 7% | 33% | 20% | 66% | 77% | 20% | 63% | 58% |
| PERCENT SUPERVISING | 84% | 44% | 60% | 36% | 22% | 40% | 25% | 30% |
| JOB DIFFICULTY INDEX | 19.6 | 18.1 | 18.7 | 14.2 | 12.4 | 17.9 | 9.8 | 11.5 |

TABLE 5 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES

| | DATA DISPLAY CENTRAL/ SACCS SPECIALISTS | AIRBORNE AWACS TECHNICIANS | FIELD TRAINING INSTRUCTORS | ELECTRONIC SWITCHING SYSTEMS MAINTENANCE PERSONNEL | GENERAL FACILITY MAINTENANCE SPECIALISTS | MANAGEMENT STAFF PERSONNEL | RESIDENT TRAINING INSTRUCTORS | INSTRUCTOR SUPERVISORS |
|---|---|---|---|---|---|---|---|---|
| NUMBER IN GROUP | 36 | 10 | 15 | 204 | 78 | 373 | 54 | 10 |
| PERCENT OF TOTAL SAMPLE | 2% | .5% | .8% | 11% | 4% | 19% | 3% | .5% |
| PERCENT IN CONUS | 97% | 40% | 100% | 46% | 83% | 80% | 98% | 80% |
| AVERAGE NUMBER TASKS PERFORMED | 84 | 103 | 98 | 115 | 40 | 65 | 28 | 40 |
| DAFSC DISTRIBUTION: | | | | | | | | |
| 30534 | 42% | 0% | 0% | 38% | 47% | 3% | 7% | 0% |
| 30554 | 53% | 10% | 27% | 50% | 46% | 25% | 54% | 0% |
| 30574 | 5% | 70% | 73% | 12% | 7% | 59% | 37% | 100% |
| 30594 | 0% | 20% | 0% | 0% | 0% | 13% | 2% | 0% |
| AVERAGE GRADE | 3.6 | 6.3 | 6.0 | 3.9 | 3.8 | 6.1 | 5.2 | 6.3 |
| AVERAGE MONTHS IN CAREER FIELD | 23 | 150 | 129 | 35 | 32 | 112 | 94 | 112 |
| AVERAGE MONTHS IN SERVICE | 38 | 176 | 166 | 58 | 55 | 174 | 119 | 188 |
| PERCENT IN FIRST ENLISTMENT | 75% | 0% | 0% | 61% | 59% | 8% | 15% | 0% |
| PERCENT SUPERVISING | 33% | 50% | 40% | 32% | 18% | 58% | 11% | 70% |
| JOB DIFFICULTY INDEX | 11.1 | 14.9 | 15.2 | 12.6 | 5.2 | 8.9 | 8.5 | 8.3 |

TABLE 6

COMPARISONS OF JOB SATISFACTION INDICATORS BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)*

| | ECSS SHIFT SUPERVISORS (N=86) | ELECTRONIC COMPUTER SYSTEMS MAINTENANCE PERSONNEL (N=493) | AIRBORNE COMMAND POST SPECIALISTS (N=10) | RCC-EDLCC/ SACCS SPECIALISTS (N=242) | EDTCC/ SACCS SPECIALISTS (N=64) | CAFMS SPECIALISTS (N=5) | GENERAL COMPUTER SYSTEMS MAINTENANCE SPECIALISTS (N=24) | SAGE SPECIALISTS (N=87) |
|---|---|---|---|---|---|---|---|---|
| EXPRESSED JOB INTEREST: | | | | | | | | |
| DULL | 4 | 9 | 0 | 13 | 8 | 0 | 8 | 6 |
| SO-SO | 13 | 11 | 0 | 10 | 13 | 0 | 8 | 10 |
| INTERESTING | 80 | 79 | 90 | 75 | 73 | 100 | 75 | 82 |
| PERCEIVED UTILIZATION OF TALENTS: | | | | | | | | |
| LITTLE OR NOT AT ALL | 11 | 14 | 10 | 18 | 8 | 0 | 33 | 10 |
| FAIRLY WELL TO PERFECTLY | 88 | 86 | 90 | 81 | 92 | 100 | 67 | 90 |
| PERCEIVED UTILIZATION OF TRAINING: | | | | | | | | |
| LITTLE OR NOT AT ALL | 15 | 17 | 30 | 12 | 5 | 40 | 33 | 16 |
| FAIRLY WELL TO PERFECTLY | 84 | 83 | 60 | 86 | 95 | 60 | 67 | 84 |
| REENLISTMENT INTENTIONS: | | | | | | | | |
| NO, OR PROBABLY NO | 22 | 37 | 20 | 51 | 53 | 20 | 38 | 48 |
| YES, OR PROBABLY YES | 62 | 57 | 60 | 46 | 45 | 80 | 58 | 50 |
| RETIRE | 15 | 5 | 20 | 1 | 2 | 0 | 4 | 1 |
| ELIGIBLE TO REENLIST | 97 | 96 | 100 | 97 | 94 | 100 | 96 | 98 |
| ELIGIBLE TO RETIRE | 23 | 7 | 20 | 3 | 3 | 20 | 17 | 2 |

* Columns may not add to 100 percent due to nonresponse or rounding

TABLE 6 (CONTINUED)

COMPARISONS OF JOB SATISFACTION INDICATORS BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)*

| | DATA DISPLAY CENTRAL/ SACCS SPECIALISTS (N=36) | AIRBORNE AWACS TECHNICIANS (N=10) | FIELD TRAINING INSTRUCTORS (N=15) | ELECTRONIC SWITCHING SYSTEMS MAINTENANCE PERSONNEL (N=204) | GENERAL FACILITY MAINTENANCE SPECIALISTS (N=78) | MANAGEMENT STAFF PERSONNEL (N=373) | RESIDENT TRAINING INSTRUCTORS (N=54) | INSTRUCTOR SUPERVISORS (N=10) |
|---|---|---|---|---|---|---|---|---|
| EXPRESSED JOB INTEREST: | | | | | | | | |
| DULL | 31 | 0 | 0 | 9 | 10 | 12 | 4 | 0 |
| SO-SO | 22 | 30 | 7 | 13 | 15 | 14 | 11 | 10 |
| INTERESTING | (47) | 70 | 93 | 75 | 73 | 71 | 78 | 90 |
| PERCEIVED UTILIZATION OF TALENTS: | | | | | | | | |
| LITTLE OR NOT AT ALL | 31 | 40 | 0 | 13 | 19 | 27 | 7 | 20 |
| FAIRLY WELL TO PERFECTLY | (69) | (60) | 100 | 86 | 81 | 73 | 91 | 80 |
| PERCEIVED UTILIZATION OF TRAINING: | | | | | | | | |
| LITTLE OR NOT AT ALL | 47 | 40 | 0 | 12 | 18 | 45 | 6 | 20 |
| FAIRLY WELL TO PERFECTLY | (53) | (60) | 100 | 88 | 82 | (55) | 91 | 80 |
| REENLISTMENT INTENTIONS: | | | | | | | | |
| NO, OR PROBABLY NO | 56 | 0 | 20 | 47 | 47 | 19 | 17 | 10 |
| YES, OR PROBABLY YES | (42) | 80 | 67 | 51 | 51 | 49 | 70 | 50 |
| RETIRE | 0 | 20 | 13 | 2 | 1 | 31 | 13 | 40 |
| ELIGIBLE TO REENLIST | 97 | 90 | 93 | 95 | 94 | 91 | 96 | 80 |
| ELIGIBLE TO RETIRE | 0 | 40 | 33 | 3 | 6 | 48 | 17 | 60 |

* Columns may not add to 100 percent due to nonresponse or rounding

TABLE 7

RELATIVE TIME SPENT ON DUTIES BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT TIME SPENT)

| DUTIES | ECSS SHIFT SUPERVISORS (N=86) | ELECTRONIC COMPUTER SYSTEMS MAINTENANCE PERSONNEL (N=493) | AIRBORNE COMMAND POST SPECIALISTS (N=10) | RCC-EDLCC/ SACCS SPECIALISTS (N=242) | EDTCC/ SACCS SPECIALISTS (N=64) | CAFMS SPECIALISTS (N=5) | GENERAL COMPUTER SYSTEMS MAINTENANCE SPECIALISTS (N=24) | SAGE SPECIALISTS (N=87) |
|---|---|---|---|---|---|---|---|---|
| A ORGANIZING AND PLANNING | 5 | 1 | 3 | 1 | * | 4 | * | 1 |
| B DIRECTING AND IMPLEMENTING | 6 | 2 | 4 | 2 | 1 | 3 | 1 | 2 |
| C INSPECTING AND EVALUATING | 7 | 2 | 4 | 2 | 1 | 1 | * | 1 |
| D TRAINING | 6 | 2 | 3 | 2 | 2 | 2 | 1 | 2 |
| E MAKING ENTRIES ON FORMS OR RECORDS AND PERFORMING ADMINISTRATIVE AND SUPPORT FUNCTIONS | 14 | 7 | 9 | 11 | 7 | 6 | 10 | 7 |
| F PERFORMING ROUTINE, REPAIR FACILITY, OR SYSTEM UNIQUE MAINTENANCE | 16 | 19 | 19 | 26 | 34 | 23 | 27 | 27 |
| G MONITORING, OPERATING, AND PROGRAMMING ELECTRONIC COMPUTER AND SWITCHIN SYSTEMS | 4 | 4 | 2 | 3 | 4 | 12 | 5 | 3 |
| H MAINTAINING CENTRAL PROCESSING UNITS (CPU) | 4 | 8 | 7 | 2 | 8 | 7 | 10 | 6 |
| I MAINTAININ FIXED SWITCHING CENTER EQUIPMENT | 3 | * | 0 | * | * | 0 | * | * |
| J MAINTAINING MOBILE SWITCHING CENTER EQUIPMENT | * | * | * | * | * | 1 | 0 | * |
| K MAINTAINING MEMORY ASSEMBLIES | 3 | 5 | 2 | 3 | 4 | 2 | 4 | 3 |
| L MAINTAINING INPUT/OUTPUT (I/O) ASSEMBLIES, SUCH AS BUFFERS, CONTROLLERS, OR INTERFACES | 2 | 4 | 4 | 4 | 3 | 1 | 2 | 2 |
| M MAINTAINING MAINTENANCE OR OPERATOR PANELS OR CONSOLES INCLUDING BUILT-IN TEST EQUIPMENT | 2 | 4 | 3 | 3 | 3 | * | 3 | 9 |
| N MAINTAINING MAGNETIC TAPE UNITS | 4 | 6 | 8 | 8 | 10 | 0 | 3 | 6 |
| O MAINTAINING MAGNETIC DRUM UNITS | * | 1 | 0 | 0 | 1 | * | 0 | 4 |
| P MAINTAINING MAGNETIC DISC SYSTEMS | 2 | 3 | 5 | * | * | 4 | 4 | * |
| Q MAINTAINING CARD PUNCH AND CARD READER EQUIPMENT | * | 3 | 0 | 0 | 2 | 0 | * | 5 |

TABLE 7 (CONTINUED)

RELATIVE TIME SPENT ON DUTIES BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT TIME SPENT)

| DUTIES | ECSS SHIFT SUPERVISORS (N=86) | ELECTRONIC COMPUTER SYSTEMS MAINTENANCE PERSONNEL (N=493) | AIRBORNE COMMAND POST SPECIALISTS (N=10) | RCC-EDLCC/ SACCS SPECIALISTS (N=242) | EDTCC/ SACCS SPECIALISTS (N=64) | CAFMS SPECIALISTS (N=5) | GENERAL COMPUTER SYSTEMS MAINTENANCE SPECIALISTS (N=24) | SAGE SPECIALISTS (N=87) |
|---|---|---|---|---|---|---|---|---|
| R MAINTAINING TAPE PUNCH AND TAPE READER EQUIPMENT | 1 | 3 | * | * | * | 0 | 2 | * |
| S MAINTAINING KEYBOARDS AND PRINTERS | 5 | 10 | 8 | 13 | 1 | 11 | 12 | 5 |
| T MAINTAINING DISPLAY EQUIPMENT | 3 | 4 | 5 | 3 | * | 3 | 6 | 11 |
| U MAINTAINING MODEMS | 2 | 1 | 1 | 7 | 11 | 6 | * | * |
| V MAINTAINING POWER SUPPLIES AND POWER DISTRIBUTION SYSTEMS | 6 | 6 | 6 | 9 | 8 | 1 | 5 | 4 |
| W MAINTAINING PLOTTERS, SUCH AS XY PLOTTERS | * | * | 0 | * | 0 | 0 | * | * |
| X *INSTALLING*, MODIFYING, RECONFIGURING, AND MANAGING ELECTRONIC COMPUTER AND SWITCHING SYSTEMS INCLUDING MOBILE EQUIPMENT | 2 | 1 | 2 | * | * | 12 | * | * |
| Y MAINTAINING, MONITORING, AND OPERATING AIRBORNE SYSTEMS UNIQUE EQUIPMENT | * | * | 3 | 0 | 0 | 0 | 0 | * |

* Denotes less than .5 percent

TABLE 7 (CONTINUED)

RELATIVE TIME SPENT ON DUTIES BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT TIME SPENT)

| DUTIES | DATA DISPLAY CENTRAL/ SACCS SPECIALISTS (N=36) | AIRBORNE AWACS TECHNICIANS (N=10) | FIELD TRAINING INSTRUCTORS (N=15) | ELECTRONIC SWITCHING SYSTEMS MAINTENANCE PERSONNEL (N=204) | GENERAL FACILITY MAINTENANCE SPECIALISTS (N=78) | MANAGEMENT STAFF PERSONNEL (N=373) | RESIDENT TRAINING INSTRUCTORS (N=54) | INSTRUCTOR SUPERVISORS (N=10) |
|---|---|---|---|---|---|---|---|---|
| A ORGANIZING AND PLANNING | 2 | 3 | 3 | 2 | 1 | 15 | 3 | 13 |
| B DIRECTING AND IMPLEMENTING | 3 | 3 | 3 | 2 | 1 | 16 | 3 | 12 |
| C INSPECTING AND EVALUATING | 2 | 3 | 2 | 2 | 1 | 19 | 2 | 13 |
| D TRAINING | 3 | 8 | 20 | 3 | 2 | 9 | 55 | 41 |
| E MAKING ENTRIES ON FORMS OR RECORDS AND PERFORMING ADMINISTRATIVE AND SUPPORT FUNCTIONS | 9 | 6 | 6 | 10 | 14 | 29 | 8 | 11 |
| F PERFORMING ROUTINE, REPAIR FACILITY, OR SYSTEM UNIQUE MAINTENANCE | 23 | 18 | 16 | 27 | 54 | 4 | 16 | 4 |
| G MONITORING, OPERATING, AND PROGRAMMING ELECTRONIC COMPUTER AND SWITCHING SYSTEMS | 3 | 7 | 7 | 3 | 2 | 3 | 4 | 4 |
| H MAINTAINING CENTRAL PROCESSING UNITS (CPU) | 1 | 8 | 10 | 1 | 2 | 1 | 2 | 0 |
| I MAINTAINING FIXED SWITCHING CENTER EQUIPMENT | 0 | 0 | 0 | 12 | * | * | 0 | 0 |
| J MAINTAINING MOBILE SWITCHING CENTER EQUIPMENT | * | * | * | 20 | 1 | * | 0 | 0 |
| K MAINTAINING MEMORY ASSEMBLIES | * | 3 | 8 | 1 | 2 | * | 1 | 0 |
| L MAINTAINING INPUT/OUTPUT (I/O) ASSEMBLIES, SUCH AS BUFFERS, CONTROLLERS, OR INTERFACES | 1 | 4 | 4 | * | 2 | * | 1 | 0 |
| M MAINTAINING MAINTENANCE OR OPERATOR PANELS OR CONSOLES INCLUDING BUILT-IN TEST EQUIPMENT | 6 | 3 | 3 | 3 | 2 | * | * | 0 |
| N MAINTAINING MAGNETIC TAPE UNITS | * | 5 | 3 | 1 | 4 | * | 1 | * |
| O MAINTAINING MAGNETIC DRUM UNITS | 0 | 5 | 0 | * | * | * | 0 | 0 |
| P MAINTAINING MAGNETIC DISC SYSTEMS | 0 | 0 | * | * | * | * | * | 0 |
| Q MAINTAINING CARD PUNCH AND CARD READER EQUIPMENT | * | 0 | * | * | 1 | * | 0 | 0 |

TABLE 7 (CONTINUED)

RELATIVE TIME SPENT ON DUTIES BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT TIME SPENT)

| DUTIES | DATA DISPLAY CENTRAL/ SACCS SPECIALISTS (N=36) | AIRBORNE AWACS TECHNICIANS (N=10) | FIELD TRAINING INSTRUCTORS (N=15) | ELECTRONIC SWITCHING SYSTEMS MAINTENANCE PERSONNEL (N=204) | GENERAL FACILITY MAINTENANCE SPECIALISTS (N=78) | MANAGEMENT STAFF PERSONNEL (N=373) | RESIDENT TRAINING INSTRUCTORS (N=54) | INSTRUCTOR SUPERVISORS (N=10) |
|---|---|---|---|---|---|---|---|---|
| R MAINTAINING TAPE PUNCH AND TAPE READER EQUIPMENT | 0 | 0 | 2 | * | * | * | * | 0 |
| S MAINTAINING KEYBOARDS AND PRINTERS | 6 | 6 | 6 | * | 4 | 1 | 1 | * |
| T MAINTAINING DISPLAY EQUIPMENT | 28 | 3 | 2 | * | 1 | * | 1 | * |
| U MAINTAINING MODEMS | 0 | 0 | 1 | * | 1 | * | 1 | 0 |
| V MAINTAINING POWER SUPPLIES AND POWER DISTRIBUTION SYSTEMS | 13 | 4 | 3 | 8 | 5 | * | * | 0 |
| W MAINTAINING PLOTTERS, SUCH AS XY PLOTTERS | * | 0 | 1 | * | * | * | 0 | 0 |
| X INSTALLING, MODIFYING, RECONFIGURING, AND MANAGING ELECTRONIC COMPUTER AND SWITCHING SYSTEMS INCLUDING MOBILE EQUIPMENT | * | 1 | * | 4 | 1 | 1 | * | 0 |
| Y MAINTAINING, MONITORING, AND OPERATING AIRBORNE SYSTEMS UNIQUE EQUIPMENT | 0 | 1 | 0 | 0 | 0 | * | * | 0 |

* Denotes less than .5 percent

TABLE 8A

COMPARISON OF SYSTEMS MAINTAINED BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)

| SYSTEMS MAINTAINED | ECSS SHIFT SUPERVISORS (N=86) | ELECTRONIC COMPUTER SYSTEMS MAINTENANCE PERSONNEL (N=493) | AIRBORNE COMMAND POST SPECIALISTS (N=10) | RCC-EDLCC/ SACCS SPECIALISTS (N=242) | EDTCC/ SACCS SPECIALISTS (N=64) | CAFMS SPECIALISTS (N=5) | GENERAL COMPUTER SYSTEMS MAINTENANCE SPECIALISTS (N=24) | SAGE SPECIALISTS (N=87) |
|---|---|---|---|---|---|---|---|---|
| AUTOVON AND AUTODIN SYSTEMS | | | | | | | | |
| 490L, OVERSEAS AUTOVON | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RAMM, RAPID ACCESS MAINTENANCE MONITOR | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TDCS, TRAFFIC DATA COLLECTION SYSTEM | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONUS AUTODIN | 0 | 0 | 10 | * | 0 | 0 | 0 | 0 |
| OVERSEAS AUTODIN | 2 | 3 | 10 | 0 | 0 | 0 | 4 | 0 |
| AIR DEFENSE AND WARNING SYSTEMS | | | | | | | | |
| 427M, NORAD | 0 | 7 | 0 | 1 | 0 | 0 | 38 | 0 |
| AN/FYQ-7, SAGE | 6 | 7 | 0 | 0 | 0 | 0 | 0 | (70) |
| AN/UYK-1, SATDI | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AN/FYQ-47, SAGE AIR DATA PROCESSOR | 6 | * | 0 | 3 | 0 | 0 | 0 | 0 |
| AN/GYQ-18, DIGITAL TV ELEMENT | 4 | 1 | 0 | * | 8 | 0 | 17 | 0 |
| SAC SYSTEMS | | | | | | | | |
| 465L, RCC-EDLCC/SACCS | 22 | 1 | 0 | (89) | 3 | 0 | 4 | 0 |
| 465L, EDTCC/SACCS | 5 | 1 | 0 | 6 | (77) | 0 | 0 | 0 |
| 465L, DISPLAY EQUIPMENT/SACCS | 1 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| IBM-360, SAC SATELLITE TRACKING SYSTEM | 0 | 11 | 0 | 0 | 3 | 0 | 4 | 1 |

* Denotes less than 1 percent

TABLE 8B

COMPARISON OF SYSTEMS MAINTAINED BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)

| SYSTEMS MAINTAINED | ECSS SHIFT SUPERVISORS (N=86) | ELECTRONIC COMPUTER SYSTEMS MAINTENANCE PERSONNEL (N=493) | AIRBORNE COMMAND POST SPECIALISTS (N=10) | RCC-EDLCC/ SACCS SPECIALISTS (N=242) | EDTCC/ SACCS SPECIALISTS (N=64) | CAFMS SPECIALISTS (N=5) | GENERAL COMPUTER SYSTEMS MAINTENANCE SPECIALISTS (N=24) | SAGE SPECIALISTS (N=87) |
|---|---|---|---|---|---|---|---|---|
| AIRBORNE SYSTEMS AND EQUIPMENT | | | | | | | | |
| E-3A, AWACS SYSTEM | 4 | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
| PACCS, POST ATTACK COMMAND CONTROL SYSTEM | 0 | 0 | 70 | 0 | 0 | 0 | 0 | 0 |
| AN/UYK-47, GROUND DEVELOPMENT SYSTEM | 1 | 1 | 50 | 0 | 3 | 0 | 4 | 0 |
| TACTICAL OR MOBILE SYSTEMS | | | | | | | | |
| AN/FTC-28/29, FIXED TELEPHONE CENTRAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AN/TSQ-91, COMMAND CONTROL SYSTEM | 4 | 7 | 0 | * | 0 | 0 | 0 | 0 |
| AN/TCC-22, TELEPHONE CENTRAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AN/TTC-30, ELECTRONIC TELEPHONE CENTRAL OFFICE | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| AN/TTC-32, MANUAL SWITCH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AN/TTC-39, AUTOMATIC CIRCUIT SWITCH | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| AN/TYC-10, MESSAGE PROCESSING CENTER | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| AN/TYQ-11, TACTICAL IMAGERY INTERPRETATION | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| AN/TYQ-14, DISPLAY CONTROL STORAGE AND RETRIEVAL SYSTEM | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| HM-4118/407L, TACTICAL AIR CONTROL SYSTEM | 6 | 8 | 0 | * | 0 | 0 | 0 | 2 |
| WS-428A, TACTICAL INFORMATION PROCESSING AND INTERPRETATION (TIPI) | 1 | 7 | 0 | 0 | 0 | 0 | 4 | 0 |
| OTHER SYSTEMS | 14 | 37 | 30 | 5 | 9 | 80 | 21 | 14 |
| NO SPECIFIC SYSTEM | 2 | 1 | 0 | 0 | 3 | 20 | 0 | 1 |

* Denotes less than 1 percent

TABLE 8C

COMPARISON OF SYSTEMS MAINTAINED BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)

| SYSTEMS MAINTAINED | DATA DISPLAY CENTRAL/ SACCS SPECIALISTS (N=36) | AIRBORNE AWACS TECHNICIANS (N=10) | FIELD TRAINING INSTRUCTORS (N=15) | ELECTRONIC SWITCHING SYSTEMS MAINTENANCE PERSONNEL (N=204) | GENERAL FACILITY MAINTENANCE SPECIALISTS (N=78) | MANAGEMENT STAFF PERSONNEL (N=373) | RESIDENT TRAINING INSTRUCTORS (N=54) | INSTRUCTOR SUPERVISORS (N=10) |
|---|---|---|---|---|---|---|---|---|
| AUTOVON AND AUTODIN SYSTEMS | | | | | | | | |
| 490L, OVERSEAS AUTOVON | 0 | 0 | 0 | (50) | 4 | 6 | 6 | 10 |
| RAMM, RAPID ACCESS MAINTENANCE MONITOR | 0 | 0 | 0 | 24 | 1 | 4 | 2 | 10 |
| TDCS, TRAFFIC DATA COLLECTION SYSTEM | 0 | 0 | 0 | 26 | 1 | 4 | 4 | 10 |
| CONUS AUTODIN | 0 | 0 | 0 | 0 | 0 | * | 0 | 0 |
| OVERSEAS AUTODIN | 0 | 0 | 0 | 0 | 5 | 2 | 2 | 0 |
| AIR DEFENSE AND WARNING SYSTEMS | | | | | | | | |
| 427M, NORAD | 0 | 0 | 13 | 0 | 3 | 6 | 2 | 20 |
| AN/FYQ-7, SAGE | 3 | 0 | 0 | 0 | 12 | 6 | 0 | 10 |
| AN/UYK-1, SATDI | 0 | 0 | 0 | 0 | 0 | * | 0 | 0 |
| AN/FYQ-47, SAGE AIR DATA PROCESSOR | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 10 |
| AN/GYQ-18, DIGITAL TV ELEMENT | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 0 |
| SAC SYSTEMS | | | | | | | | |
| 465L, RCC-EDLCC/SACCS | 3 | 0 | 7 | 0 | 39 | 16 | 11 | 0 |
| 465L, EDTCC/SACCS | 0 | 0 | 0 | 0 | 3 | 8 | 4 | 0 |
| 465L, DISPLAY EQUIPMENT/SACCS | (97) | 0 | 0 | 0 | 6 | 7 | 4 | 0 |
| IBM-360, SAC SATELLITE TRACKING SYSTEM | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 10 |

* Denotes less than 1 percent

TABLE 8D

COMPARISON OF SYSTEMS MAINTAINED BY CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)

| SYSTEMS MAINTAINED | DATA DISPLAY CENTRAL/ SACCS SPECIALISTS (N=36) | AIRBORNE AWACS TECHNICIANS (N=10) | FIELD TRAINING INSTRUCTORS (N=15) | ELECTRONIC SWITCHING SYSTEMS MAINTENANCE PERSONNEL (N=204) | GENERAL FACILITY MAINTENANCE SPECIALISTS (N=78) | MANAGEMENT STAFF PERSONNEL (N=373) | RESIDENT TRAINING INSTRUCTORS (N=54) | INSTRUCTOR SUPERVISORS (N=10) |
|---|---|---|---|---|---|---|---|---|
| AIRBORNE SYSTEMS AND EQUIPMENT | | | | | | | | |
| E-3A, AWACS SYSTEM | 0 | 100 | 7 | 0 | 0 | 4 | 2 | 0 |
| PACCS, POST ATTACK COMMAND CONTROL SYSTEM | 0 | 0 | 0 | 0 | 0 | 0 | * | 0 |
| AN/UYK-47, GROUND DEVELOPMENT SYSTEM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| TACTICAL OR MOBILE SYSTEMS | | | | | | | | |
| AN/FTC-28/29, FIXED TELEPHONE CENTRAL | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| AN/TSQ-91, COMMAND CONTROL SYSTEM | 0 | 0 | 0 | 11 | 1 | 3 | 0 | 0 |
| AN/TCC-22, TELEPHONE CENTRAL | 0 | 0 | 0 | 9 | 3 | 1 | 0 | 0 |
| AN/TTC-30, ELECTRONIC TELEPHONE CENTRAL OFFICE | 0 | 0 | 0 | 42 | 3 | 4 | 11 | 0 |
| AN/TTC-32, MANUAL SWITCH | 0 | 0 | 0 | 10 | 0 | 1 | 0 | 0 |
| AN/TTC-39, AUTOMATIC CIRCUIT SWITCH | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| AN/TYC-10, MESSAGE PROCESSING CENTER | 0 | 0 | 0 | 3 | 0 | 2 | 0 | 0 |
| AN/TYQ-11, TACTICAL IMAGERY INTERPRETATION | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| AN/TYQ-14, DISPLAY CONTROL STORAGE AND RETRIEVAL SYSTEM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| HM-4118/407L, TACTICAL AIR CONTROL SYSTEM | 0 | 0 | 0 | 4 | 0 | 5 | 11 | 0 |
| WS-428A, TACTICAL INFORMATION PROCESSING AND INTERPRETATION (TIPI) | 0 | 0 | 13 | 0 | 1 | 3 | 2 | 0 |
| OTHER SYSTEMS | 0 | 0 | 47 | 6 | 10 | 17 | 22 | 10 |
| NO SPECIFIC SYSTEM | 0 | 0 | 7 | 1 | 8 | 21 | 20 | 30 |

* Denotes less than 1 percent

## ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational analysis. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information is also used to evaluate how well career ladder documents, such as AFR 39-1 Specialty Descriptions and the Specialty Training Standard (STS), reflect what career ladder personnel are actually doing in the field.

A comparison of duty and task performance between 3-skill level (30534) personnel, regardless of shred, and 5-skill level (30554) personnel indicates the jobs they perform are essentially the same. This is consistent with their common AFR 39-1 Specialty Descriptions; therefore, they are discussed as one group (30534/30554) in the skill level descriptions that follow. Tables are provided, however, to reflect the distribution of 3-skill level shreds across career ladder clusters and independent job types (Table 9), and relative time spent on duties by shred groups (Table 10). Table 9 reveals that, for the most part, personnel are being used as intended by their DAFSC. These 3-skill level personnel are clustered within the technical job types relative to the equipment identified by their DAFSC shred. For example, Table 9 reflects 88 of 118 (75 percent) of the DAFSC 30534G respondents are found in the RCC-EDLCC/SACCS Specialists job type; and 86 percent of the 30534P respondents grouped in the AUTOVON Switch Repair job. Table 10 identifies differences in time spent on duties across DAFSC shred groups, with the most noticeable differences highlighted.

### Skill-Level Descriptions

DAFSC 30534/30554. The 1,313 3-/5-skill level personnel (68 percent of the survey sample) perform an average of 113 tasks. At this skill level, approximately 95 percent of the personnel spend 25 percent of their time on general repair facility tasks (see Table 12) common to various systems and equipment, with another 12 percent of their time devoted to forms, records, and administative support functions. Twenty-eight percent of this group are found in the Electronic Computer Systems Maintenance Personnel cluster (see Table 11). Representative tasks performed by group members may be found in Table 13. Supervisory-type duties (inventory duties A, B, C, and D) account for 10 percent of their relative time, with 28 percent of the group acting as supervisors. Fifty-six percent of the group are in their first enlistment, with 30 percent in their second. Expressed job interest and perceived utilization of talents and training are very high. Favorable reenlistment intent was expressed from 51 percent of the skill-level groups.

DAFSC 30574. The 7-skill level group is composed of 558 airmen (29 percent of the survey sample). They perform an average of 122 tasks. These personnel spend just over 40 percent of their time in supervisory functions, with 68 percent acting as supervisors. Even so, performing computer or switching systems maintenance still constitutes 44 percent of their time spent on the job. Sixteen percent of their time is spent in administrative-type duties.

Representative tasks are presented in Table 14. Ninety percent of the 7-skill level personnel are in their third or subsequent enlistment. Indicators for job interest and utilization of talents and training are all high.

Representative differences between the 30534/30554 and 30574 DAFSC groups are presented in Table 15. Again, it is clear that while the 7-skill level airmen still perform maintenance duties, they have a much greater management, supervision, and training responsibility in their career ladder than the 3-/5-skill level group.

DAFSC 30594. This group of 52, comprises less than 3 percent of the survey sample and performs an average of 73 tasks with 41 of those tasks accounting for 50 percent of their job time. The primary duties for which these personnel are responsible are Inspecting and Evaluating (26 percent of their relative time); Directing and Implementing (21 percent); Organizing and Planning (19 percent); and administrative-type functions (17 percent). Table 16 reflects representative tasks performed by this group. Eighty-three percent of these senior airmen are supervisors, with 50 percent supervising four or more people.

## Summary

Career ladder progression is well defined, with personnel at the 3- and 5-skill level spending the vast majority of their time performing technical tasks. In comparison, at the 7-skill level, management, supervisory, and administrative-type functions increase to over half of the job time. Finally, the 9-skill level reflects a job that is manager oriented with as little as 10 percent of the job involving technical duties.

TABLE 9

DISTRIBUTION OF DAFSC 30534 SHRED PERSONNEL ACROSS CAREER LADDER JOBS

| JOB GROUPS | | DAFSC 30534 SHREDS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | E (N=138) | F (N=38) | G (N=118) | H (N=24) | K (N=12) | P (N=43) | Q (N=46) | R (N=16) |
| II.A. | TACTICAL INTERPRETATION SYSTEM REPAIR SPECIALISTS | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| II.B. | INTERMEDIATE COMPUTER MAINT SPECIALISTS | 9 | 1 | 2 | 0 | 4 | 0 | 0 | 0 |
| II.C. | MAINFRAME PROCESSOR & DISC SYS SPECIALISTS | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| II.D. | TACTICAL AIR CONTROL SYS REPAIR SPECIALISTS | 1 | 0 | 1 | 0 | (6) | 0 | 0 | 0 |
| II.E. | AIR DEFENSE SYSTEM REPAIR SPECIALISTS | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| II.F. | AWACS REPAIR SPECIALISTS | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| II.G. | 427M-CHEYENNE MOUNTAIN COMPLEX TECHNICIANS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (6) |
| II.H. | GROUND DEVELOPMENT & DIGITAL TV SYSTEM SPECIALISTS | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| II.I. | CARD PUNCH/READER EQUIPMENT REPAIRMEN | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| II.K. | TAPE PUNCH/READER EQUIPMENT REPAIRMEN | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IV. | RCC-EDLCC/SACCS SPECIALISTS | 6 | 2 | (88) | 1 | 0 | 0 | 0 | 0 |
| V. | EDTCC/SACCS SPECIALISTS | 6 | (26) | 0 | 0 | 0 | 0 | 0 | 0 |
| VI. | CAFMS SPECIALISTS | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| VII. | GENERAL COMPUTER MAINTENANCE SPECIALISTS | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| VIII. | SAGE SPECIALISTS | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IX. | DATA DISPLAY CENTRAL/SACCS | 1 | 0 | 0 | (14) | 0 | 0 | 0 | 0 |
| XII.A. | AUTOVON SWITCH REPAIR SPECIALISTS | 1 | 0 | 0 | 0 | 0 | (37) | 3 | 0 |
| XII.B. | TACTICAL CONTROL SWITCH REPAIRMEN | 1 | 0 | 0 | 0 | 0 | 0 | (36) | 0 |
| XIII. | GENERAL FACILITY MAINTENANCE SPECIALISTS | 10 | 2 | 17 | 4 | 1 | 0 | 2 | 0 |
| XIV.B. | MAINTENANCE WORKCENTER NCOIC | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| XIV.E. | SUPPLY MONITORS | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| XIV.H. | SYSTEMS CONTROLLERS | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 |
| XV. | RESIDENT INSTRUCTORS | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |

TABLE 10

RELATIVE PERCENT TIME SPENT ON DUTIES BY DAFSC 30534 SHRED GROUPS

| DUTIES | DAFSC 30534 SHREDS | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | E (N=138) | F (N=38) | G (N=118) | H (N=24) | K (N=12) | P (N=43) | Q (N=46) | R (N=16) |
| A ORGANIZING AND PLANNING | * | 1 | 1 | 1 | 1 | * | 2 | * |
| B DIRECTING AND IMPLEMENTING | 1 | * | 1 | 2 | 3 | * | 2 | * |
| C INSPECTING AND EVALUATING | 1 | 1 | 1 | 1 | 1 | 1 | 1 | * |
| D TRAINING | 3 | 1 | 1 | 2 | 2 | 1 | 2 | * |
| E MAKING ENTRIES ON FORMS OR RECORDS AND PERFORMING ADMINSITRATIVE AND SUPPORT FUNCTIONS | 8 | 12 | 12 | 15 | 10 | 7 | 9 | 8 |
| F PERFORMING ROUTINE, REPAIR FACILITY, OR SYSTEM UNIQUE MAINTENANCE | (29) | (32) | (31) | (30) | (24) | (37) | (28) | (29) |
| G MONITORING, OPERATING, AND PROGRAMMING ELECTRONIC COMPUTER AND SWITCHING SYSTEMS | 4 | 4 | 3 | 5 | 5 | 4 | 3 | 3 |
| H MAINTAINING CENTRAL PROCESSING UNITS (CPU) | 7 | 5 | 2 | * | 6 | 1 | 1 | (9) |
| I MAINTAINING FIXED SWITCHING CENTER EQUIPMENT | * | * | * | 0 | 0 | (22) | 4 | * |
| J MAINTAINING MOBILE SWITCHING CENTER EQUIPMENT | * | 1 | * | * | * | 5 | (33) | * |
| K MAINTAINING MEMORY ASSEMBLIES | 4 | 3 | 3 | 0 | 5 | 2 | 1 | 6 |
| L MAINTAINING INPUT/OUTPUT (I/O) ASSEMBLIES, SUCH AS BUFFERS, CONTROLLERS, OR INTERFACES | 2 | 3 | 4 | 1 | 4 | 1 | * | 3 |
| M MAINTAINING MAINTENANCE OR OPERATOR PANELS OR CONSOLES INCLUDING BUILT-IN TEST EQUIPMENT | 5 | 3 | 3 | 4 | 4 | 4 | 2 | 6 |
| N MAINTAINING MAGNETIC TAPE UNITS | 6 | (10) | 8 | * | 6 | 1 | * | 1 |
| O MAINTAINING MAGNETIC DRUM UNITS | 2 | 1 | 0 | 0 | 0 | * | * | 0 |
| P MAINTAINING MAGNETIC DISC SYSTEMS | 2 | 0 | * | 0 | 0 | 1 | * | 1 |

* Denotes less than .5 percent

NOTE: Columns may not equal 100 percent due to rounding

TABLE 10 (CONTINUED)

RELATIVE PERCENT TIME SPENT ON DUTIES BY DAFSC 30534 SHRED GROUPS

| DUTIES | DAFSC 30534 SHREDS | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | E (N=138) | F (N=38) | G (N=118) | H (N=24) | K (N=12) | P (N=43) | Q (N=46) | R (N=16) |
| Q MAINTAINING CARD PUNCH AND CARD READER EQUIPMENT | 4 | 1 | * | * | 1 | * | * | 1 |
| R MAINTAINING TAPE PUNCH AND TAPE READER EQUIPMENT | 2 | * | 1 | 0 | 3 | * | * | 1 |
| S MAINTAINING KEYBOARDS AND PRINTERS | 6 | 1 | (11) | 5 | 7 | 1 | * | 9 |
| T MAINTAINING DISPLAY EQUIPMENT | 7 | * | 3 | (23) | 4 | * | * | (10) |
| U MAINTAINING MODEMS | 1 | (13) | 6 | * | 4 | * | * | * |
| V MAINTAINING POWER SUPPLIES AND POWER DISTRIBUTION SYSTEMS | 5 | 8 | 8 | (10) | 6 | (10) | 6 | 9 |
| W MAINTAINING PLOTTERS, SUCH AS XY PLOTTERS | * | 0 | * | 0 | 0 | 0 | 0 | 2 |
| X INSTALLING, MODIFYING, RECONFIGURING, AND MANAGING ELECTRONIC COMPUTER AND SWITCHING SYSTEMS INCLUDING MOBILE EQUIPMENT | 1 | * | * | * | 2 | 2 | 5 | * |
| Y MAINTAINING, MONITORING, AND OPERATING AIRBORNE SYSTEMS UNIQUE EQUIPMENT | * | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



* Denotes less than .5 percent

NOTE: Columns may not equal 100 percent due to rounding

TABLE 11

DISTRIBUTION OF DAFSC SKILL LEVEL GROUP MEMBERS ACROSS CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT MEMBERS RESPONDING)

| JOB GROUPS | DAFSC 30534/54 (N=1,313) | DAFSC 30574 (N=558) | DAFSC 30594 (N=52) |
|---|---|---|---|
| I. ECSS SHIFT SUPERVISORS (N=86) | 3 | 9 | 1 |
| II. ELECTRONIC COMPUTER SYSTEMS MAINTENANCE PERSONNEL CLUSTER (N=493) | (28) | (23) | 0 |
| III. AIRBORNE COMMAND POST SPECIALISTS (N=10) | * | * | 0 |
| IV. RCC-EDLCC/SACCS SPECIALISTS (N=242) | (17) | 3 | 0 |
| V. EDTCC/SACCS SPECIALISTS (N=64) | 5 | * | 0 |
| VI. CAFMS SPECIALISTS (N=5) | * | * | 0 |
| VII. GENERAL COMPUTER MAINTENANCE SPECIALISTS (N=24) | 2 | 1 | 0 |
| VIII. SAGE SPECIALISTS (N=87) | 6 | 2 | 0 |
| IX. DATA DISPLAY CENTRAL/SACCS SPECIALISTS (N=36) | 3 | * | 0 |
| X. AIRBORNE AWACS TECHNICIANS (N=10) | * | 1 | 4 |
| XI. FIELD TRAINING INSTRUCTORS (N=15) | * | 2 | 0 |
| XII. ELECTRONIC SWITCHING SYSTEMS MAINTENANCE PERSONNEL (N=204) | (14) | 4 | 0 |
| XIII. GENERAL FACILITY MAINTENANCE SPECIALISTS (N=78) | 6 | 1 | 0 |
| XIV. MANAGEMENT STAFF PERSONNEL CLUSTER (N=373) | 8 | (39) | (93) |
| XV. RESIDENT TRAINING INSTRUCTORS (N=54) | 3 | 4 | 2 |
| XVI. INSTRUCTOR SUPERVISORS (N=10) | 0 | 2 | 0 |
| PERCENT NOT GROUPED | 5 | 9 | 0 |
| TOTAL | 100 | 100 | 100 |

* Denotes less than 1 percent

TABLE 12

RELATIVE PERCENT TIME SPENT ON DUTIES BY DAFSC SKILL LEVEL GROUPS

| DUTIES | DAFSC 30534/54 (N=1,313) | DAFSC 30574 (N=558) | DAFSC 30594 (N=52) |
|---|---|---|---|
| A ORGANIZING AND PLANNING | 2 | 9 | 19 |
| B DIRECTING AND IMPLEMENTING | 2 | 10 | 21 |
| C INSPECTING AND EVALUATING | 3 | 11 | 26 |
| D TRAINING | 4 | 10 | 8 |
| E MAKING ENTRIES ON FORMS OR RECORDS AND PERFORMING ADMINISTRATIVE AND SUPPORT FUNCTIONS | 12 | 16 | 17 |
| F PERFORMING ROUTINE, REPAIR FACILITY, OR SYSTEM UNIQUE MAINTENANCE | 25 | 12 | 2 |
| G MONITORING, OPERATING, AND PROGRAMMING ELECTRONIC COMPUTER AND SWITCHING SYSTEMS | 3 | 3 | 2 |
| H MAINTAINING CENTRAL PROCESSING UNITS (CPU) | 4 | 3 | 1 |
| I MAINTAINING FIXED SWITCHING CENTER EQUIPMENT | 2 | 1 | * |
| J MAINTAINING MOBILE SWITCHING CENTER EQUIPMENT | 3 | 1 | 0 |
| K MAINTAINING MEMORY ASSEMBLIES | 3 | 2 | * |
| L MAINTAINING INPUT/OUTPUT (I/O) ASSEMBLIES, SUCH AS BUFFERS, CONTROLLERS, OR INTERFACES | 3 | 2 | * |
| M MAINTAINING MAINTENANCE OR OPERATOR PANELS OR CONSOLES INCLUDING BUILT-IN TEST EQUIPMENT | 3 | 2 | * |
| N MAINTAINING MAGNETIC TAPE UNITS | 5 | 3 | * |
| O MAINTAINING MAGNETIC DRUM UNITS | 1 | 1 | * |
| P MAINTAINING MAGNETIC DISC SYSTEMS | 1 | 1 | * |
| Q MAINTAINING CARD PUNCH AND CARD READER EQUIPMENT | 1 | 1 | * |
| R MAINTAINING TAPE PUNCH AND TAPE READER EQUIPMENT | 1 | 1 | 0 |
| S MAINTAINING KEYBOARDS AND PRINTERS | 6 | 4 | * |
| T MAINTAINING DISPLAY EQUIPMENT | 4 | 2 | * |
| U MAINTAINING MODEMS | 2 | 1 | * |
| V MAINTAINING POWER SUPPLIES AND POWER DISTRIBUTION SYSTEMS | 6 | 3 | * |
| W MAINTAINING PLOTTERS, SUCH AS XY PLOTTERS | * | * | 0 |
| X INSTALLING, MODIFYING, RECONFIGURING, AND MANAGING ELECTRONIC COMPUTER AND SWITCHING SYSTEMS INCLUDING MOBILE EQUIPMENT | 1 | 1 | 1 |
| Y MAINTAINING, MONITORING, AND OPERATING AIRBORNE SYSTEMS UNIQUE EQUIPMENT | * | * | * |

* Denotes less than .5 percent

NOTE: Columns may not equal 100 percent due to rounding

TABLE 13

REPRESENTATIVE TASKS PERFORMED BY 30534/30554 PERSONNEL

| | TASKS | PERCENT MEMBERS PERFORMING (N=1,313) |
|---|---|---|
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 81 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 80 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 77 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 77 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 75 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 73 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 72 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 71 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 70 |
| F281 | REMOVE OR REPLACE FILTERS | 69 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 69 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 68 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 66 |
| F250 | *LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS,* PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 65 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 64 |
| F222 | CLEAN OR TREAT FILTERS | 61 |
| F223 | CLEAN READ/WRITE HEADS | 60 |
| V747 | *REMOVE OR REPLACE POWER SUPPLIES* | 60 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 60 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 59 |
| V741 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON POWER SUPPLIES | 58 |
| E200 | RESEARCH MANUALS FOR PARTS NUMBERS | 58 |
| V740 | PERFORM OPERATIONAL CHECKS OF POWER SUPPLIES | 57 |
| V730 | DETECT FAULTS WITHIN POWER SUPPLIES USING FAULT INDICATORS, STATUS PANELS, OR TEST EQUIPMENT | 52 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 52 |
| F270 | PERFORM VISUAL INSPECTIONS OF CABLES, CABLE TROUGHS, OR CONNECTOR AIR DUCTS | 52 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 52 |
| S664 | PERFORM PMIs ON PRINTERS | 50 |
| V726 | ALIGN POWER SUPPLY UNITS, SUCH AS RECTIFIERS, INVERTERS, CONVERTERS, OR REGULATORS | 50 |
| F233 | INTERPRET WIRING DIAGRAMS FOR INTER OR INTRA UNIT DATA FLOW | 49 |

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY 30574 PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=558) |
|---|---|---|
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 67 |
| A7 | DETERMINE WORK PRIORITIES | 64 |
| B50 | ORIENT NEWLY ASSIGNED PERSONNEL | 62 |
| D107 | DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION | 61 |
| C89 | PREPARE AIRMAN PERFORMANCE REPORTS (APR) | 61 |
| D106 | COUNSEL TRAINEES ON TRAINING PROGRESS | 61 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 57 |
| B34 | COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS | 56 |
| E133 | ESCORT VISITORS THROUGH FACILITIES | 56 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 55 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 54 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 54 |
| E200 | RESEARCH MANUALS FOR PARTS NUMBERS | 53 |
| B41 | DRAFT OR WRITE CORRESPONDENCE | 52 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 52 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 51 |
| B55 | SUPERVISE ELECTRONIC COMPUTER AND SWITCHING SYSTEMS SPECIALISTS (AFSC 30554) | 51 |
| A24 | PLAN WORK ASSIGNMENTS | 51 |
| D104 | CONDUCT OJT | 51 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, EMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 50 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 50 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 49 |
| C93 | REVIEW CORRESPONDENCE | 49 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 49 |
| E187 | MAKE ENTRIES ON DD FORMS 1574 (SERVICEABLE TAG-MATERIEL) | 49 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 48 |
| A6 | DETERMINE SUPPLY REQUIREMENTS | 46 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 46 |
| C92 | REVIEW AFTO FORMS 350 (REPAIRABLE ITEM PROCESSING TAG) | 46 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 46 |

TABLE 15

REPRESENTATIVE TASK DIFFERENCES BETWEEN 30534/30554 AND 30574 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | | DAFSC 30534/54 (N=1,313) | DAFSC 30574 (N=558) | DIFF |
|---|---|---|---|---|
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 77 | 43 | +34 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 80 | 49 | +31 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 80 | 49 | +31 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 70 | 41 | +29 |
| F222 | CLEAN OR TREAT FILTERS | 61 | 34 | +27 |
| F281 | REMOVE OR REPLACE FILTERS | 69 | 43 | +26 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 71 | 45 | +26 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 77 | 51 | +26 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 75 | 53 | +22 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 74 | 52 | +22 |
| F223 | CLEAN READ/WRITE HEADS | 60 | 39 | +21 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 69 | 48 | +21 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 63 | 43 | +20 |
| A1 | ASSIGN PERSONNEL TO DUTY POSITIONS | 37 | 79 | -42 |
| B41 | DRAFT OR WRITE CORRESPONDENCE | 52 | 94 | -42 |
| B40 | DRAFT INPUTS TO HIGHER HEADQUARTERS DIRECTIVES | 20 | 60 | -40 |
| C70 | EVALUATE JOB DESCRIPTIONS | 22 | 58 | -36 |
| B30 | COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES | 30 | 65 | -35 |
| C83 | INDORSE AIRMAN PERFORMANCE REPORTS | 37 | 67 | -30 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 57 | 87 | -30 |
| C63 | DRAFT REPLIES TO INSPECTION REPORTS | 34 | 63 | -29 |
| A19 | PLAN BRIEFINGS | 22 | 50 | -28 |
| A20 | PLAN EQUIPMENT OR FACILITY MAINTENANCE REQUIREMENTS | 23 | 50 | -27 |
| B45 | IMPLEMENT SELF-INSPECTION PROGRAMS | 35 | 58 | -23 |
| C66 | EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS | 40 | 62 | -22 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 55 | 75 | -22 |

TABLE 16

REPRESENTATIVE TASKS PERFORMED BY 30594 PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=52) |
|---|---|---|
| B41 | DRAFT OR WRITE CORRESPONDENCE | 94 |
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 94 |
| C93 | REVIEW CORRESPONDENCE | 88 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 87 |
| A1 | ASSIGN PERSONNEL TO DUTY POSITIONS | 79 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 75 |
| C89 | PREPARE AIRMAN PERFORMANCE REPORTS (APR) | 73 |
| B34 | COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS | 71 |
| C69 | EVALUATE INDIVIDUALS FOR RECOGNITION | 71 |
| C90 | PREPARE RECOMMENDATIONS FOR AWARDS | 71 |
| A29 | SCHEDULE TEMPORARY DUTY, LEAVES, OR PASSES | 71 |
| B50 | ORIENT NEWLY ASSIGNED PERSONNEL | 69 |
| E133 | ESCORT VISITORS THROUGH FACILITIES | 69 |
| C83 | INDORSE AIRMAN PERFORMANCE REPORTS (APR) | 67 |
| A5 | DETERMINE PERSONNEL REQUIREMENTS | 67 |
| A7 | DETERMINE WORK PRIORITIES | 67 |
| B30 | COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES | 65 |
| A2 | ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL | 65 |
| C63 | DRAFT REPLIES TO INSPECTION REPORTS | 63 |
| A16 | ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES | 63 |
| C66 | EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS | 62 |
| A15 | ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDING OPERATING PROCEDURES (SOP) | 62 |
| B47 | INITIATE PERSONNEL ACTION REQUESTS | 62 |
| A27 | PREPARE JOB DESCRIPTIONS | 62 |
| E128 | ADVISE COMMAND STAFF AGENCIES ON CURRENT OPERATIONAL STATUS OF EQUIPMENT OR SYSTEMS | 60 |
| B40 | DRAFT INPUTS TO HIGHER HEADQUARTERS DIRECTIVES | 60 |
| B54 | SUPERVISE ELECTRONIC COMPUTER AND SWITCHING SYSTEMS TECHNICIANS (AFSC 30574) | 60 |
| A4 | DETERMINE EQUIPMENT REQUIREMENTS | 60 |
| B45 | IMPLEMENT SELF-INSPECTION PROGRAMS | 58 |
| C70 | EVALUATE JOB DESCRIPTIONS | 58 |

## ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS

The foregoing 3-/5-, 7-, and 9-skill level survey data were compared to the AFR 39-1 Specialty Descriptions for the Electronic Computer and Switching Systems Specialist (AFSCs 30514/30534/30554), the Electronic Computer and Switching Systems Technician (AFSC 30574), and the Electronic Computer and Switching Systems Superintendent (AFSC 30594), dated 1 January 1982. These descriptions are intended to give a broad overview of the duties and tasks performed by each skill level of the career ladder.

The 3-/5-skill level descriptions appear complete and accurately reflect the broad range of duties and responsibilities of these personnel. Likewise the 7- and 9-skill level descriptions appear complete and accurate, with the 7-skill level description reflecting not only the supervisory responsibilities, but the systems maintenance duties as well, which is supported by the survey data.

## ANALYSIS OF TAFMS GROUPS

In this study, as in most others, an analysis of total active federal military service (TAFMS) groups is undertaken to provide a description of how the jobs and the perception of those jobs within a career ladder change over time. As is typical in most career ladders, as time in service and experience increase, there is a corresponding increase in performance of duties involving supervisory, managerial, and training tasks (see Table 17). Conversely, as time spent in supervisory and administrative duties increases, relative time on tasks in the technical area generally declines.

The 1-48 months group spends 16 percent of its time on supervisory and administrative duties. The 49-96 months group, often referred to as the second-enlistment group, spends 29 percent of their time on similar tasks and the remainder of the respondents, the career airmen, spend 55 percent of their time in these nontechnical duties. These shifts in areas of responsibility parallel the changes discussed in earlier comments on DAFSC progression. It is obvious, however, that career field incumbents are technically oriented. Aside from the significant change reflected in Duty F (see Table 17), most technical duties reflect only minor shifting in percent time spent. This results from the averaging of duties across the large number of diverse jobs discussed in the SPECIALTY JOBS section.

### First-Enlistment Personnel

The 1-48 months TAFMS group, first-enlistment, is the most relevant for examining ABR training programs; therefore, this group is highlighted to provide a foundation for examination of career field training and utilization. Figure 3 shows the distribution of 1-48 months TAFMS personnel across the job groups discussed earlier in the report. Of the 738 first-enlistment personnel in the study (38 percent of the total sample), 22 percent were working in the broad Electronic Computer Systems Maintenance cluster, 33 percent were in the three SACCS-related jobs, and 17 percent in the Switching Systems cluster. Only a small percent are found in the management or instructor jobs, 4 percent and 1 percent, respectively.

Table 18 displays all tasks performed by 50 percent or more of the first-enlistment personnel. Most tasks involve routine maintenance, maintenance records activity, or tasks related to power supplies. In addition to tasks performed, training personnel are interested in special or test equipment used by first-enlistment personnel. Table 19 lists test equipment used by more than 10 percent of these personnel. Responses from first-termers indicate that oscilloscopes, multimeters, and digital voltmeters are inherent to jobs performed by that group.

## Job Satisfaction Data

Table 20 presents data reflecting the job interest, perceived utilization of talents and training, and reenlistment intentions of selected 305X4 TAFMS groups. Comparisons were also made between the 305X4 TAFMS groups and comparative samples of all other Mission Equipment Maintenance career ladders surveyed in 1982.

Comparison of the groups indicates that job satisfaction indicators for 305X4 first-term airmen are slightly to somewhat higher than those of the comparative sample first-term group. Comparisons of 305X4 first-term personnel with the other 305X4 TAFMS groups show a decrease in all indicators, except reenlistment intent for the second-enlistment group (49-96 months TAFMS), while the career airmen group (97+ months) has essentially the same job interest and perception of utilization of talents with a much lower perception of training utilization. Expressed job interest in the 305X4 groups is 4 to 7 percent higher than that in all the comparative sample groups.

FIGURE 3

DISTRIBUTION OF 305X4 FIRST-ENLISTMENT PERSONNEL ACROSS CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)
(N=738)

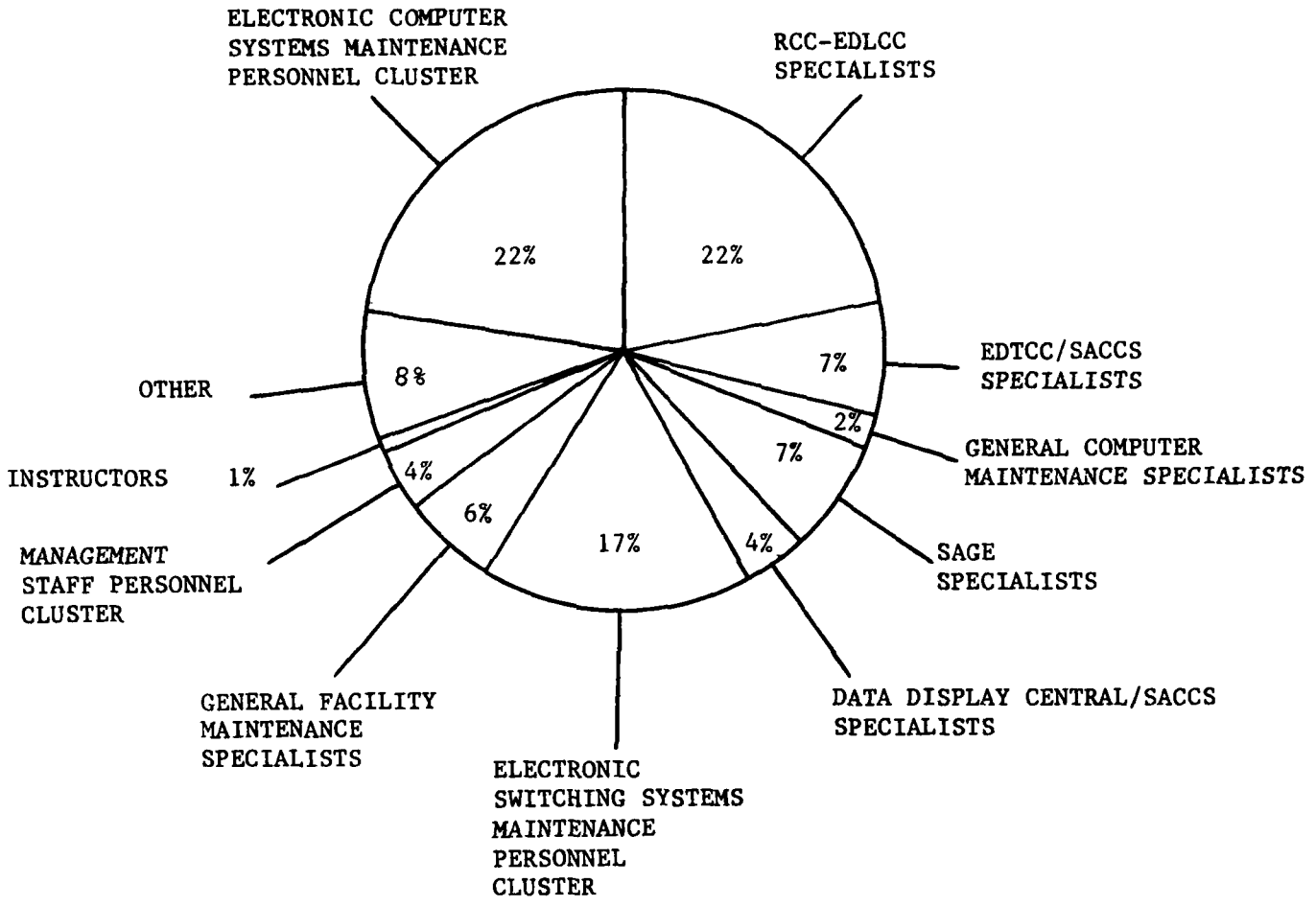


TABLE 17

RELATIVE PERCENT TIME SPENT ON DUTIES BY TAFMS GROUPS

| DUTIES | TAFMS (MONTHS) 1-48 (N=738) | 49-96 (N=445) | 97+ (N=738) |
|---|---|---|---|
| A ORGANIZING AND PLANNING | 1 | 3 | 9 |
| B DIRECTING AND IMPLEMENTING | 1 | 4 | 10 |
| C INSPECTING AND EVALUATING | 1 | 4 | 11 |
| D TRAINING | 2 | 6 | 9 |
| E MAKING ENTRIES ON FORMS OR RECORDS AND PERFORMING ADMINISTRATIVE AND SUPPORT FUNCTIONS | 11 | 12 | 16 |
| F PERFORMING ROUTINE, REPAIR FACILITY, OR SYSTEM UNIQUE MAINTENANCE | 28 | 22 | 13 |
| G MONITORING, OPERATING, AND PROGRAMMING ELECTRONIC COMPUTER AND SWITCHING SYSTEMS | 4 | 4 | 3 |
| H MAINTAINING CENTRAL PROCESSING UNITS (CPU) | 4 | 5 | 4 |
| I MAINTAINING FIXED SWITCHING CENTER EQUIPMENT | 3 | 2 | 1 |
| J MAINTAINING MOBILE SWITCHING CENTER EQUIPMENT | 4 | 2 | 1 |
| K MAINTAINING MEMORY ASSEMBLIES | 3 | 3 | 2 |
| L MAINTAINING INPUT/OUTPUT (I/O) ASSEMBLIES, SUCH AS BUFFERS, CONTROLLERS, OR INTERFACES | 3 | 3 | 2 |
| M MAINTAINING MAINTENANCE OR OPERATOR PANELS OR CONSOLES INCLUDING BUILT-IN TEST EQUIPMENT | 4 | 3 | 2 |
| N MAINTAINING MAGNETIC TAPE UNITS | 5 | 4 | 3 |
| O MAINTAINING MAGNETIC DRUM UNITS | 0 | 1 | 0 |
| P MAINTAINING MAGNETIC DISC SYSTEMS | 1 | 1 | 1 |
| Q MAINTAINING CARD PUNCH AND CARD READER EQUIPMENT | 1 | 2 | 1 |
| R MAINTAINING TAPE PUNCH AND TAPE READER EQUIPMENT | 1 | 1 | 1 |
| S MAINTAINING KEYBOARDS AND PRINTERS | 7 | 6 | 4 |
| T MAINTAINING DISPLAY EQUIPMENT | 5 | 3 | 2 |
| U MAINTAINING MODEMS | 3 | 2 | 1 |
| V MAINTAINING POWER SUPPLIES AND POWER DISTRIBUTION SYSTEMS | 7 | 5 | 3 |
| W MAINTAINING PLOTTERS, SUCH AS XY PLOTTERS | * | * | * |
| X INSTALLING, MODIFYING, RECONFIGURING, AND MANAGING ELECTRONIC COMPUTER AND SWITCHING SYSTEMS INCLUDING MOBILE EQUIPMENT | 1 | 1 | 1 |
| Y MAINTAINING, MONITORING, AND OPERATING AIRBORNE SYSTEMS UNIQUE EQUIPMENT | * | * | * |

* Denotes less than 1 percent

NOTE: Columns may not equal 100 percent due to rounding

TABLE 18

TASKS PERFORMED BY 50 PERCENT OR MORE FIRST-ENLISTMENT PERSONNEL
(1-48 MONTHS TAFMS)

| TASKS | | PERCENT MEMBERS PERFORMING (N=738) |
|---|---|---|
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 85 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 84 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 80 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 80 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 78 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 76 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 76 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 75 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 73 |
| F281 | REMOVE OR REPLACE FILTERS | 71 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 70 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 70 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 68 |
| F280 | REMOVE OR REPLACE ELCTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 67 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 66 |
| F222 | CLEAN OR TREAT FILTERS | 63 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 62 |
| F223 | CLEAN READ/WRITE HEADS | 61 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 60 |
| V741 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON POWER SUPPLIES | 60 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 58 |
| V740 | PERFORM OPERATIONAL CHECKS OF POWER SUPPLIES | 57 |
| E200 | RESEARCH MANUALS FOR PARTS NUMBERS | 57 |
| F270 | PERFORM VISUAL INSPECTIONS OF CABLES, CABLE TROUGHS, OR CONNECTOR AIR DUCTS | 56 |
| V730 | DETECT FAULTS WITHIN POWER SUPPLIES USING FAULT INDICATORS, STATUS PANELS, OR TEST EQUIPMENT | 53 |
| V726 | ALIGN POWER SUPPLY UNITS, SUCH AS RECTIFIERS, INVERTERS, CONVERTERS, OR REGULATORS | 51 |
| F271 | PERFORM VISUAL INSPECTIONS OF NONELECTRICAL HARDWARE | 50 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 50 |
| V732 | DETECT FAULTS WITHIN POWER SUPPLIES USING VISUAL FAULT INDICATORS | 50 |

TABLE 19

TEST EQUIPMENT USED BY MORE THAN 10 PERCENT OF
305X4 FIRST-ENLISTMENT PERSONNEL
(1-48 MONTHS TAFMS)

| TEST EQUIPMENT USED | PERCENT MEMBERS RESPONDING (N=738) |
|---|---|
| OSCILLOSCOPES | 95 |
| MULTIMETERS | 93 |
| DIGITAL VOLTMETERS OR MULTIMETERS | 89 |
| FREQUENCY COUNTERS | 67 |
| DIFFERENTIAL VOLTMETERS | 64 |
| SIGNAL GENERATORS | 60 |
| POWER SUPPLY TESTERS | 52 |
| CURRENT TESTERS | 51 |
| ELECTRONIC COUNTERS | 49 |
| REGULATED POWER SUPPLY UNITS | 43 |
| HIGH VOLTAGE PROBES | 38 |
| CURRENT PROBES OR GUNS | 38 |
| VACUUM TUBE VOLTMETERS (VTVM) | 29 |
| MEG-OHM METERS | 29 |
| LOGIC PROBES | 28 |
| FUNCTION GENERATORS | 27 |
| SOLID-STATE DEVICE TESTERS | 26 |
| WIRE LINE SIMULATORS | 24 |
| SIGNALING TEST SETS | 21 |
| IMPEDANCE MATCHING DEVICES | 19 |
| CAPACITANCE TESTERS | 17 |
| LOGIC ANALYZERS | 17 |
| PRESSURE OR VACUUM TESTERS | 13 |
| TUBE TESTERS | 13 |

TABLE 20

COMPARISON OF JOB SATISFACTION INDICATORS BY 305X4 TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)*

| | 1-48 MONTHS TAFMS | | 49-96 MONTHS TAFMS | | 97+ MONTHS TAFMS | |
|---|---|---|---|---|---|---|
| | 305X4 (N=738) | COMPARATIVE SAMPLE (N=1,600) | 305X4 (N=445) | COMPARATIVE SAMPLE (N=859) | 305X4 (N=738) | COMPARATIVE SAMPLE (N=1,435) |
| EXPRESSED JOB INTEREST | | | | | | |
| DULL | 9 | 13 | 14 | 12 | 8 | 10 |
| SO-SO | 12 | 16 | 12 | 18 | 12 | 15 |
| INTERESTING | 76 | 69 | 72 | 67 | 77 | 73 |
| PERCEIVED UTILIZATION OF TALENTS | | | | | | |
| LITTLE OR NOT AT ALL | 15 | 23 | 21 | 21 | 18 | 18 |
| FAIRLY WELL TO PERFECTLY | 83 | 77 | 79 | 79 | 81 | 82 |
| PERCEIVED UTILIZATION OF TRAINING | | | | | | |
| LITTLE OR NOT AT ALL | 18 | 21 | 25 | 23 | 26 | 24 |
| FAIRLY WELL TO PERFECTLY | 82 | 79 | 75 | 77 | 73 | 75 |
| REENLISTMENT INTENTIONS | | | | | | |
| NO, OR PROBABLY NO | 57 | 59 | 46 | 44 | 9 | 14 |
| YES, OR PROBABLY YES | 42 | 40 | 54 | 54 | 64 | 66 |
| PLAN TO RETIRE | - | - | - | - | 26 | 18 |

* Columns may not add up to 100 percent due to nonresponses and rounding
** Comparative sample included all Mission Equipment Maintenance career ladders surveyed in 1982 (AFSCs include 304X1, 306X0, 306X1, 306X2, 445X0 F/G)

# TRAINING ANALYSIS

Occupational survey data are used to assist in the development of a training program relevant to the needs of personnel working in their first enlistment or job within a career ladder. Factors which may be used in evaluating training are the percent of first-job or first-enlistment members performing tasks, along with training emphasis and task difficulty ratings (previously explained in the SURVEY METHODOLOGY section). These factors were used in evaluating eight specialty training standards (STS) and plans of instruction (POI) for basic resident courses for the 305X4 career ladder. Technical school personnel from three training centers matched inventory tasks to the STS and POI for which they were responsible. An analysis was not done on 30534J documents, as no ABR course was active at the time of the survey. It should be noted that comments and tables presented in this section pertaining questionable elements (or lack of elements) in the training documents are intended to highlight what appear to be possible problem areas.

## Training Emphasis and Task Difficulty Data

Training emphasis and task difficulty data can be used to provide information on training needs as perceived by experienced technicians within the specialty. Comparisons can then be made between this information and present training programs to determine if course adjustments are needed.

As discussed in the SURVEY METHODOLOGY section, training emphasis data was collected by equipment experience which is most useful in the analysis of the eight equipment-oriented STSs and POIs. Table 21 illustrates examples of the different rating policies across shred specific equipment, comparing training emphasis (TE) ratings between groups and an overall rating without regard to equipment experience of the raters. It is the equipment-specific TE ratings that will be used in the analysis of training documents.

Ninety-nine senior career personnel provided ratings for task difficulty (TD) information. There was an insufficient number of raters to break this data out by equipment experience, so TD data is general in nature and not shredout specific. These ratings are standardized so average task difficulty is 5.00, with a standard deviation of 1.00. Therefore, in the following analysis of training documents, all tasks rated 6.00 or higher are generally thought to be difficult tasks within the 305X4 career field.

TABLE 21

EXAMPLES OF TASKS ILLUSTRATING RANGE OF TRAINING EMPHASIS (TE) RATING POLICIES ACROSS 305X4 EQUIPMENT SHREDS

| TASKS | | TRAINING EMPHASIS RATINGS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | EQUIPMENT SHREDS | | | | | | | |
| | | ALL* | E | F | G | H | K | P | Q | R |
| P587 | ISOLATE MALFUNCTIONS TO DISC PACK SYSTEMS | 3.19 | 4.02 | 1.75 | 1.39 | 2.33 | 3.50 | 3.67 | 2.14 | 4.80 |
| F241 | LOAD PROGRAMS USING DISC PACKS | 3.07 | 3.47 | .00 | .83 | .00 | 1.50 | 3.42 | 1.57 | 3.80 |
| U715 | BENCH CHECK MODEMS | 2.29 | 1.62 | 7.25 | 5.72 | 6.67 | 3.00 | 1.17 | .00 | 2.40 |
| F260 | PERFORM DRAWER TESTER OPERATION TO IDENTIFY FAULTY CARD UNDER TEST | 2.43 | 1.62 | 5.00 | 6.00 | 6.67 | 1.25 | 1.83 | 2.14 | 1.80 |
| N532 | ALIGN FORMAT MESSAGE COMPOSERS (FMC) | 1.93 | 1.72 | 5.00 | 5.72 | 6.67 | .00 | .00 | .00 | .00 |
| G317 | OPERATE DIGITAL DATA MODEMS | 1.95 | 1.80 | 5.25 | 4.44 | 4.67 | 1.50 | 1.83 | .00 | 2.00 |
| T681 | DETECT FAULTS WITHIN PROJECTION DISPLAY EQUIPMENT | .95 | 1.80 | 3.00 | 1.06 | 4.00 | .00 | .00 | .00 | 1.60 |
| L496 | ALIGN BUFFERS, CONTROLLERS, OR INTERFACES | 2.94 | 3.20 | 3.25 | 2.78 | 4.33 | 4.50 | 1.33 | 2.00 | 3.40 |
| K461 | ALIGN CORE MEMORY ASSEMBLIES | 2.29 | 2.93 | 3.25 | 1.53 | 4.33 | 7.00 | 1.17 | 2.43 | 2.00 |
| K488 | REMOVE OR REPLACE CORE MEMORY ASSEMBLIES | 2.58 | 3.50 | 3.00 | 1.72 | 4.00 | 4.25 | 1.92 | 1.86 | 2.00 |
| H343 | ALIGN MAIN FRAME PROCESSORS | 2.53 | 3.25 | 1.75 | .97 | 2.33 | 5.75 | 1.58 | 1.57 | 3.20 |
| R624 | DETECT FAULTS WITHIN TAPE PUNCH EQUIPMENT | 1.74 | 2.12 | .00 | 1.44 | .00 | 4.50 | .00 | 1.29 | 2.00 |
| G313 | INTERPRET COMPUTER CODES | 2.66 | 3.18 | 1.50 | 1.56 | 2.00 | 3.75 | 4.58 | 3.43 | 2.60 |
| F240 | LOAD PROGRAMS USING CARTRIDGE DISCS | 2.49 | 2.62 | .00 | .83 | .00 | 1.50 | 5.83 | 2.29 | 4.40 |
| I375 | DETECT FAULTS WITHIN SWITCH COMPARATOR CIRCUITS | 1.07 | .85 | .00 | .33 | .00 | .00 | 6.67 | 5.14 | .00 |
| I385 | ISOLATE MALFUNCTIONS WITHIN TRUNK SCANNER CIRCUITS | 1.04 | .73 | .00 | .19 | .00 | .00 | 6.25 | 4.86 | .00 |
| X765 | CROSS-CONNECT INTERMEDIATE AND MAIN FRAMES | 1.31 | .92 | .00 | .89 | .00 | .00 | 5.17 | 4.00 | 2.00 |
| J422 | ISOLATE MALFUNCTIONS WITHIN REGISTER CIRCUITS | 1.01 | 1.03 | .00 | .19 | .00 | .00 | 3.42 | 7.29 | .00 |
| J409 | DETECT FAULTS WITHIN SCANNER CIRCUITS | .88 | .83 | .00 | .33 | .00 | .00 | 3.08 | 7.14 | .00 |
| X791 | PREPARE MOBILE COMMUNICATIONS EQUIPMENT FOR DEPLOYMENT | .81 | .83 | .00 | .19 | .00 | 2.75 | 2.00 | 4.43 | .00 |
| T721 | WRITE BASIC PROGRAM ROUTINES TO CHECK SPECIFIC CRT CIRCUITS | 1.46 | 1.65 | 1.25 | .72 | 1.67 | 2.25 | .25 | .43 | 3.60 |
| F273 | PROGRAM CHIPS USING PROM PROGRAMMERS | 1.18 | 1.58 | .00 | .31 | .00 | .00 | 1.33 | .00 | 3.40 |

* Reflects TE rating computed from all raters without regard to equiment experience

NOTE: Boxed TE ratings identify tasks considered high in TE for first-enlistment personnel

## TRAINING DOCUMENTS

Since occupational survey data are gathered from career field incumbents, managers can use it to determine if STSs and POIs meet user needs. It is essential that these training documents reflect actual or desired utilization patterns because of the impact on preparing incumbents to perform their jobs.

To facilitate the use of percent members performing, training emphasis, and task difficulty data, computerized listings pairing these factors for each task to the respective STS items(s) or POI block(s) were developed. These computer matchings, called FACPRNTs (FCPT), have been provided to appropriate managers in a TRAINING EXTRACT report presenting a combination of STS and POI FACPRNTs by shredout, containing information for various Time In Career Field (TICF) and DAFSC groups which managers can use to assess training needs and determine how to more effectively use training resources. A summary of the above information is described in this section.

As mentioned earlier, TE ratings used in the following analysis are those specific to the equipment covered by the training documents under discussion. Likewise, the percent graduates performing groups are personnel graduated from the specific shred being discussed with 1-30 and 1-48 months TICF. The 1-30 months TICF group represents those graduates in their frst-job and the 1-48 months TICF group provides a slightly larger population for first-enlistment than would be found using 1-48 months TAFMS. NOTE: Task difficulty ratings are not equipment-specific, therefore, discretion should be used when this task factor is used in training decisions.

### General Computer Systems Training Documents

STS 305X4E. A comprehensive review of this STS compared STS items to survey data and revealed good coverage of the functions performed by survey respondents. Table 22 lists examples of tasks performed by over 10 percent of first-job and first-enlistment personnel that were not linked to specific STS references. The 305X3E TRAINING EXTRACT will reflect that the vast majority of tasks not matched to the STS relate to supervisory functions or are performed by less than 10 percent of the respondents.

POI 30534E. An analysis of data associated with tasks matched to POI 30534E, dated 20 October 1980, showed that POI blocks and objectives were well supported. Table 23 lists examples of tasks performed by over 30 percent of the first-job and first-enlistment personnel not linked to specific POI items. These examples all rated above average in recommended training emphasis with task difficulty ratings from just below average to above average. These tasks and related tasks in the "tasks not referenced" POI portion of the training extract should be examined for possible inclusion in the POI.

TABLE 22

EXAMPLES OF TASKS NOT REFERENCED IN STS 305X4E PERFORMED BY MORE THAN 10 PERCENT OF 30534E COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| H358 | LOAD AND OPERATE CPUs WITH OPERATIONAL PROGRAMS | 5.15 | 4.45 | 39 | 41 |
| S667 | REMOVE OR REPLACE KEYBOARD SUBASSEMBLIES | 3.95 | 4.35 | 26 | 28 |
| V742 | PERFORM PMIs OR POWER DISTRIBUTION SYSTEMS | 3.70 | 4.01 | 25 | 26 |
| M513 | BENCH CHECK MAINTENANCE OR OPERATOR PANELS OR CONSOLES | 3.68 | 5.30 | 14 | 15 |
| V739 | PERFORM OPERATIONAL CHECKS OF POWER DISTRIBUTION SYSTEMS | 3.62 | 4.43 | 27 | 28 |
| G310 | DISCRIMINATE BETWEEN HARDWARE AND SOFTWARE FAILURE SOURCES | 3.20 | 7.01 | 29 | 31 |

* Training emphasis average = 1.96 with SD = 1.40; High TE = 3.36 and above
** Task difficulty average = 5.00 with SD =1.00; High TD = 6.00 and above

TABLE 23

EXAMPLES OF TASKS NOT REFERENCED IN POI 3ABR30534E PERFORMED BY MORE THAN 30 PERCENT OF 30534E COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| K470 | INTERPRET RESULTS OF MEMORY DIAGNOSTIC PROGRAMS | 6.00 | 5.90 | 48 | 49 |
| H358 | LOAD AND OPERATE CPUs WITH OPERATIONAL PROGRAMS | 4.02 | 4.45 | 39 | 41 |
| K466 | DETECT FAULTS WITHIN CORE MEMORY ASSEMBLIES | 4.95 | 6.14 | 42 | 43 |
| S649 | DETECT FAULTS WITHIN PRINTERS USING DIAGNOSTIC PROGRAMS | 4.43 | 4.69 | 54 | 55 |
| H345 | DETECT FAULTS WITHIN MAIN FRAME PROCESSORS USING FAULT INDICATORS OR STATUS PANELS | 4.09 | 5.69 | 41 | 42 |
| S647 | DETECT FAULTS WITHIN KEYBOARDS USING DIAGNOSTIC PROGRAMS | 3.90 | 4.85 | 35 | 37 |
| K471 | ISOLATE MALFUNCTIONS TO CORE MEMORY ASSEMBLIES | 3.78 | 5.92 | 42 | 43 |
| S660 | PERFORM MECHANICAL ALIGNMENTS OF PRINTERS | 4.34 | 6.00 | 45 | 47 |
| V728 | DETECT FAULTS WITHIN POWER DISTRIBUTION SYSTEMS USING FAULT INDICATORS, STATUS PANELS, OR TEST EQUIPMENT | 4.37 | 4.75 | 37 | 39 |
| V730 | DETECT FAULTS WITHIN POWER SUPPLIES USING FAULT INDICATORS, STATUS PANELS, OR TEST EQUIPMENT | 4.32 | 4.76 | 43 | 45 |
| M519 | ISOLATE MALFUNCTIONS WITHIN MAINTENANCE OR OPERATOR PANELS OR CONSOLES TO CARD OR SUBASSEMBLY | 3.76 | 5.86 | 41 | 43 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 3.86 | 4.19 | 53 | 55 |
| P584 | DETECT FAULTS WITHIN DISC PACK SYSTEMS USING DIAGNOSTIC PROGRAMS | 3.34 | 5.41 | 30 | 30 |
| V727 | BENCH CHECK POWER SUPPLIES | 4.43 | 5.68 | 30 | 30 |
| T702 | REMOVE OR REPLACE CRT DISPLAY EQUIPMENT | 3.10 | 4.89 | 37 | 41 |
| S669 | REMOVE OR REPLACE PRINTER SUBASSEMBLIES | 3.46 | 4.61 | 41 | 41 |
| T703 | REMOVE OR REPLACE CRT DISPLAY EQUIPMENT SUBASSEMBLIES | 3.07 | 4.81 | 45 | 48 |

* High training emphasis = 3.36 and above
** High task difficulty = 5.00 and above

## 465L, EDTCC/SACCS Training Documents

STS 305X4F. An analysis of tasks matched to the 30534F STS revealed a thorough match was accomplished by training center personnel. Generally, STS items were well supported for retention in future STS revisions. Only 18 tasks rated average or higher in training emphasis were not matched to any STS item. Examples of those unmatched tasks performed by more than 10 percent of the 30534F respondents are listed in Table 24.

POI 30534F. The occupational survey data basically was supportive of course objectives requiring task performance of students. Only in the units relating to programming (Blocks XII2 through XII4) were the percent members performing tasks related to performance measured objectives (XII2A, XII2B, XII3A, and XII3B) below 30 percent. There were 68 tasks not matched to the POI performed by 30 percent or more of the first-enlistment personnel, with 47 of those tasks having a TE rating of 3.58 or higher. Several of these tasks are covered in the electronics principles blocks of the POI which are not included in this analysis. Table 25 reflects examples of tasks not referenced to the POI and performed by more than 30 percent of the first-enlistment personnel. In reviewing the tasks not matched of the training extract computer printout, training personnel need to determine if the course, in particular the areas of memory, tape units, and modems, requires modification.

TABLE 24

EXAMPLES OF TASKS NOT REFERENCD IN STS 305X4F PERFORMED BY MORE THAN 10 PERCENT OF 30534F COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| N541 | DETECT FAULTS WITHIN FMCs USING OPERATIONAL OR MAINTENANCE CONSOLES | 5.00 | 6.16 | 10 | 11 |
| V739 | PERFORM OPERATIONAL CHECKS OF POWER DISTRIBUTION SYSTEMS | 5.00 | 4.43 | 28 | 28 |
| V742 | PERFORM PMIs ON POWER DISTRIBUTION SYSTEMS | 5.00 | 4.01 | 25 | 25 |
| H358 | LOAD AND OPERATE CPUs WITH OPERATIONAL PROGRAMS | 3.25 | 4.45 | 16 | 15 |
| M513 | BENCH CHECK MAINTENANCE OR OPERATOR PANELS OR CONSOLES | 3.00 | 5.30 | 12 | 11 |
| G310 | DISCRIMINATE BETWEEN HARDWARE AND SOFTWARE FAILURE SOURCES | 1.50 | 7.01 | 29 | 30 |

* High TE rating = 3.58 or higher
** High TD rating = 6.00 or higher

TABLE 25

EXAMPLES OF TASKS NOT REFERENCED IN POI 30534F PERFORMED BY MORE THAN 30 PERCENT OF 30534F COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| U719 | ISOLATE MALFUNCTIONS TO MODEMS | 7.00 | 4.91 | 64 | 62 |
| F233 | INTERPRET WIRING DIAGRAMS FOR INTER-INTRA UNIT DATA FLOW | 6.75 | 5.77 | 48 | 49 |
| N533 | ALIGN REEL TO REEL MAGNETIC TAPE UNITS | 5.50 | 5.97 | 57 | 54 |
| N536 | BENCH CHECK REEL TO REEL MAGNETIC TAPE UNITS | 5.50 | 5.74 | 35 | 32 |
| N542 | DETECT FAULTS WITHIN REEL TO REEL MAGNETIC TAPE UNITS USING DIAGNOSTIC PROGRAMS | 5.50 | 5.42 | 58 | 54 |
| N544 | DETECT FAULTS WITHIN REEL TO REEL MAGNETIC TAPE UNITS USING OPERATIONAL OR MAINTENANCE CONSOLES | 5.50 | 5.51 | 54 | 50 |
| U714 | ALIGN TONE GENERATORS | 5.50 | 5.60 | 48 | 45 |
| U724 | REMOVE OR REPLACE MODEM SUBASSEMBLIES | 5.50 | 4.13 | 58 | 55 |
| U725 | REMOVE OR REPLACE MODEMS | 5.50 | 3.64 | 42 | 42 |
| K482 | PERFORM OPERATIONAL CHECKS OF MEMORY ASSEMBLIES USING MAINTENANCE PANELS | 5.25 | 5.20 | 35 | 34 |
| K485 | PERFORM PMIs ON CORE MEMORY ASSEMBLIES | 5.25 | 4.43 | 32 | 30 |
| H346 | DETECT FAULTS WITHIN MAINFRAME PROCESSORS USING OPERATIONAL OR MAINTENANCE CONSOLES | 4.75 | 5.79 | 41 | 38 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 3.75 | 6.02 | 62 | 62 |

* High TE rating = 3.58 or higher
** High TD rating = 6.00 or higher

STS 305X4G. For the most part, data associated with tasks matched to the 305X4G STS supported the STS as written. In certain instances though, very small percentages of first-job or first-enlistment G-shred personnel, and a relatively small number of 5- and 7-skill level personnel, performed tasks matched to particular STS subparagraphs (see Table 26). The subparagraphs linked to tasks with low percent members performing should be reviewed to determine whether changes in the STS are warranted. In addition, Table 27 lists examples of technical tasks performed by more than 10 percent of the G-shred respondents and rated average or above average on training emphasis, that were not referenced to any STS paragraph.

POI 30534G. An analysis of task data matched to the G-shred POI revealed that all objectives were supported by that data. In contrast, some 30534G tasks not referenced to the POI deserve consideration for possible inclusion. For example, tasks shown in Table 28 were performed by substantial percentages of G-shred respondents and have significant training emphasis or task difficulty ratings. Again, the computerized training extract will reflect several unreferenced tasks having high percent members performing and high TE that are covered in the electronics principle blocks of the POI. Those tasks, however, account for only a small percentage of the 69 unmatched tasks performed by more than 30 percent of the first-enlistment group.

TABLE 26

EXAMPLES OF TASKS MATCHED TO STS 305X4G PERFORMED BY FEW 30534G COURSE GRADUATES

| STS PARAGRAPH | TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING | |
|---|---|---|---|---|---|---|
| | | | | | 1-30 TICF | 1-48 TICF |
| 12a(4) | 0574 | PERFORM OPERATIONAL CHECKS OF MAGNETIC DRUM UNITS | 1.00 | 4.38 | 0 | .6 |
| | 0576 | PERFORM PMIs ON MAGNETIC DRUM UNITS | .72 | 4.24 | 0 | .6 |
| 12a(17) | W757 | PERFORM PMIs ON PLOTTERS | .36 | 4.27 | 0 | 0 |
| 12d(4) | 0567 | ALIGN MAGNETIC DRUM UNITS | .69 | 6.56 | 0 | .6 |
| 12d(17) | W749 | ALIGN PLOTTERS | .39 | 5.39 | 0 | 0 |

* High TE rating = 3.01 or higher
** High TD rating = 6.00 or higher

TABLE 27

EXAMPLES OF TASKS NOT REFERENCED IN STS 305X4G PERFORMED BY MORE THAN 10 PERCENT OF 30534G COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| N541 | DETECT FAULTS WITHIN FMCs USING OPERATIONAL OR MAINTENANCE CONSOLES | 5.06 | 6.16 | 43 | 42 |
| V739 | PERFORM OPERATIONAL CHECKS OF POWER DISTRIBUTION SYSTEMS | 3.67 | 4.43 | 19 | 20 |
| F271 | PERFORM VISUAL INSPECTIONS OF NONELECTRICAL HARDWARE | 3.31 | 2.87 | 60 | 59 |
| F270 | PERFORM VISUAL INSPECTIONS OF CABLES, CABLE TROUGHS, OR CONNECTOR AIR DUCTS | 3.11 | 3.12 | 59 | 60 |
| V742 | PERFORM PMIs ON POWER DISTRIBUTION SYSTEMS | 2.69 | 4.01 | 17 | 17 |
| F251 | MAINTAIN ELECTRONIC TYPEWRITER EQUIPMENT | 2.39 | 6.24 | 18 | 18 |
| F220 | CHECK QUALITY OF GROUNDING SYSTEMS | 2.31 | 4.26 | 17 | 18 |
| M512 | BENCH CHECK BUILT-IN TEST EQUIPMENT | 2.19 | 5.31 | 16 | 15 |
| G310 | DISCRIMINATE BETWEEN HARDWARE AND SOFTWARE FAILURE SOURCES | 1.94 | 7.01 | 13 | 13 |
| M513 | BENCH CHECK MAINTENANCE OR OPERATOR PANELS OR CONSOLES | 1.94 | 5.30 | 17 | 18 |

* High TE rating = 3.01 or higher
** High TD rating = 6.00 or higher

TABLE 28

EXAMPLES OF TASKS NOT REFERENCED IN POI 3ABR30534G PERFORMED BY MORE THAN 30 PERCENT OF 30534G COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| V727 | BENCH CHECK POWER SUPPLIES | 6.06 | 5.68 | 60 | 59 |
| N540 | DETECT FAULTS WITHIN FMCs USING INDICATORS OR STATUS PANELS | 5.28 | 5.86 | 54 | 52 |
| N541 | DETECT FAULTS WITHIN FMCs USING OPERATIONAL OR MAINTENANCE CONCOLES | 5.06 | 6.16 | 43 | 42 |
| U714 | ALIGN TONE GENERATORS | 4.78 | 5.60 | 35 | 36 |
| S659 | PERFORM MECHANICAL ALIGNMENTS OF KEYBOARDS | 4.50 | 6.03 | 30 | 31 |
| S657 | PERFORM ELECTRICAL ALIGNMENTS OF KEYBOARDS | 4.44 | 5.49 | 42 | 43 |
| S649 | DETECT FAULTS WITHIN PRINTERS USING DIAGNOSTIC ROUTINES | 4.19 | 4.69 | 38 | 39 |
| T678 | DETECT FAULTS WITHIN CRT DISPLAY EQUIPMENT | 3.19 | 5.27 | 39 | 40 |
| T677 | BENCH CHECK CRT DISPLAY EQUIPMENT | 2.94 | 5.33 | 36 | 37 |
| S647 | DETECT FAULTS WITHIN KEYBOARDS USING DIAGNOSTIC ROUTINES | 2.86 | 4.85 | 31 | 32 |
| K466 | DETECT FAULTS WITHIN CORE MEMORY ASSEMBLIES | 2.64 | 6.14 | 42 | 44 |
| K475 | ISOLATE MALFUNCTIONS WITHIN CORE MEMORY ASSEMBLIES TO CARD OR SUBASSEMBLY | 2.47 | 6.23 | 40 | 43 |
| K471 | ISOLATE MALFUNCTIONS TO CORE MEMORY ASSEMBLIES | 2.36 | 5.92 | 40 | 42 |
| K476 | ISOLATE MALFUCNTIONS WITHIN CORE MEMORY ASSEMBLIES TO COMPONENTS | 2.17 | 6.73 | 41 | 42 |
| K488 | REMOVE OR REPLACE CORE MEMORY ASSEMBLIES | 1.72 | 4.92 | 34 | 36 |

* High TE rating = 3.01 or higher
** High TD rating = 6.00 or higher

## 465L, Display Equipment/SACCS Training Documents

STS 305X4H. The analysis of data matched with the H-shred STS revealed the STS was well supported, with the exception of those subparagraphs related to plotters and magnetic drum units. Those subparagraphs should be considered for possible deletion due to low percent members performing. There were 11 technical tasks not referenced to the STS performed by more than 10 percent of the first-enlistment H-shred personnel. Table 29 lists those tasks rated above average in training emphasis.

POI 30534H. Survey data matched to the H-shred POI was basically supportive of course objectives. Block XIII, Data Distribution Group, may require some review by training personnel. Only a single task, "Perform operational checks of buffers, controllers, or interfaces", was matched to several objectives in Block XIII. While this task has a high TE of 4.33, it has a less than average TD (4.86) and is performed by only 15 percent of the first-job or first-enlistment personnel. Training personnel should also review the computer printout of tasks not referenced to determine if existing areas should be expanded or new areas added to the basic course. Table 30 lists some examples of the 63 unmatched tasks performed by 30 percent or more of the first-enlistment H-shred respondents.

TABLE 29

EXAMPLES OF TASKS NOT REFERENCED IN STS 305X4H PERFORMED BY MORE THAN 10 PERCENT OF 30534H COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| V739 | PERFORM OPERATIONAL CHECKS OF POWER DISTRIBUTION SYSTEMS | 4.33 | 4.43 | 20 | 20 |
| V742 | PERFORM PMIs ON POWER DISTRIBUTION SYSTEMS | 4.33 | 4.01 | 23 | 22 |
| M513 | BENCH CHECK MAINTENANCE OR OPERATOR PANELS OR CONSOLES | 4.00 | 5.30 | 40 | 39 |
| M512 | *BENCH CHECK BUILT-IN TEST EQUIPMENT* | 4.00 | 5.31 | 15 | 15 |
| T708 | REMOVE OR REPLACE PROCESSING MATERIALS, SUCH AS FILM, CHEMICALS, OR OILS | 4.00 | 4.62 | 65 | 66 |
| T694 | MIX PROCESSING CHEMICALS FOR PROJECTION DISPLAY EQUIPMENT | 2.33 | 4.68 | 25 | 27 |

* High TE rating = 3.55 or higher
** High TD rating = 6.00 or higher

TABLE 30

EXAMPLES OF TASKS NOT REFERENCED IN POI 30534H PERFORMED BY MORE THAN 30 PERCENT OF 30534H COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| V726 | ALIGN SOURCE SUPPLY UNITS | 7.00 | 5.50 | 50 | 49 |
| V727 | BENCH CHECK POWER SUPPLIES | 7.00 | 5.68 | 45 | 44 |
| F233 | INTERPRET WIRING DIAGRAMS FOR INTER OR INTRO UNIT DATA FLOW | 6.67 | 5.77 | 38 | 39 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 6.33 | 4.30 | 40 | 42 |
| S658 | PERFORM ELECTRICAL ALIGNMENTS OF PRINTERS | 6.00 | 5.55 | 35 | 34 |
| S660 | PERFORM MECHANICAL ALIGNMENTS OF PRINTERS | 6.00 | 6.00 | 40 | 42 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 5.67 | 4.77 | 40 | 39 |
| T672 | ALIGN CRT DISPLAY EQUIPMENT | 4.33 | 5.83 | 48 | 46 |
| T673 | ALIGN FLUID DISTRIBUTION SYSTEMS | 4.33 | 5.16 | 60 | 61 |
| T682 | ISOLATE MALFUNCTIONS TO CRT DISPLAY EQUIPMENT | 4.00 | 5.28 | 45 | 44 |
| T685 | ISOLATE MALFUNCTIONS WITHIN CRT DISPLAY EQUIPMENT TO CARD OR SUBASSEMBLY | 4.00 | 5.85 | 40 | 39 |
| T686 | ISOLATE MALFUNCTIONS WITHIN CRT DISPLAY EQUIPMENT TO COMPONENT | 4.00 | 6.24 | 38 | 37 |
| T687 | ISOLATE MALFUNCTIONS WITHIN FLUID DISTRIBUTION SYSTEMS | 4.00 | 5.33 | 60 | 61 |
| T698 | PERFORM PMIs ON FLUID DISTRIBUTION SYSTEMS | 4.00 | 4.27 | 60 | 61 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 2.67 | 6.02 | 43 | 44 |

* High TE rating = 3.55 or higher
** High TD rating = 6.00 or higher

## HM-4118/407L Training Documents

STS 305X4K. Overall, data corresponding to tasks matched to the 305X4K STS supported that document, as written. Subparagraphs pertaining to magnetic drum units and plotters, however, contain tasks performed by few first-job or first-enlistment personnel. Training personnel should examine those subparagraphs and the corresponding matched tasks in the computer printout to determine if STS changes are warranted. Also, tasks not referenced should be examined because, although they were not referenced to the STS by training center personnel, as many as 50 of these tasks were performed by over 10 percent of the first-enlistment group. Examples of these tasks can be found in Table 31.

Unique to K-shred personnel appears to be those tasks relating to deployment of mobile equipment, including preparation for deployment and installation or removal. Consideration of the addition of a subparagraph to the STS on such activities may be warranted.

POI 30534K. Table 32 shows that K-shred personnel receive training on some tasks performed by very small percentages or none of the first-job course graduates. Those tasks should be evaluated to determine if continued training is justified. Table 33 contains only a sampling of the 110 tasks not referenced to the POI performed by more than 30 percent of the respondents. Ninety-six of those 110 tasks were rated above average in training emphasis, with 58 high in TE (3.56 and above). Areas appearing to require review are keyboards and printers, modems, power supplies and distribution systems, and tape punch and reader equipment.

TABLE 31

EXAMPLES OF TASKS NOT REFERENCED IN STS 305X4K PERFORMED BY MORE THAN 10 PERCENT OF 30534K COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| G310 | DISCRIMINATE BETWEEN HARDWARE AND SOFTWARE FAILURE SOURCES | 5.75 | 7.01 | 39 | 39 |
| X774 | INSPECT INSTALLATION MOUNTINGS, POSITIONING OF EQUIPMENT, OR CONNECTIONS | 4.00 | 4.67 | 21 | 22 |
| X791 | PREPARE MOBILE COMMUNICATIONS EQUIPMENT FOR DEPLOYMENT | 2.75 | 5.64 | 21 | 17 |
| X792 | PREPARE MOBILE COMMUNICATIONS EQUIPMENT FOR OPERATION AT DEPLOYED LOCATIONS | 2.75 | 5.58 | 21 | 17 |
| X793 | PREPARE MOBILE ELECTRONIC COMPUTER EQUIPMENT FOR DEPLOYMENT | 2.75 | 5.56 | 37 | 30 |
| X794 | PREPARE MOBILE ELECTRONIC COMPUTER EQUIPMENT FOR OPERATION AT DEPLOYED LOCATIONS | 2.75 | 5.54 | 26 | 22 |
| F251 | MAINTAIN ELECTRONIC TYPEWRITER EQUIPMENT | 2.25 | 6.24 | 42 | 52 |
| V739 | PERFORM OPERATIONAL CHECKS OF POWER DISTRIBUTION SYSTEMS | 2.00 | 4.43 | 47 | 48 |
| V742 | PERFORM PMIs ON POWER DISTRIBUTION SYSTEMS | 1.75 | 4.01 | 42 | 48 |
| X763 | CONFIGURE ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT OR ACCESSORIES FOR DEPLOYMENT | 1.50 | 6.10 | 26 | 22 |

* High TE rating = 3.56 or higher
** High TD rating = 6.00 or higher

TABLE 32

EXAMPLES OF TASKS MATCHED TO POI 30534K PERFORMED BY FEW 30534K COURSE GRADUATES

| POI BLOCK | TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|---|
| XII2A | J405 | DETECT FAULTS WITHIN MATRIX CIRCUITS | .00 | 5.22 | 0 | 0 |
| | J420 | ISOLATE MALFUNCTIONS WITHIN MATRIX CIRCUITS | .00 | 5.76 | 0 | 0 |
| | J438 | PERFORM OPERATIONAL CHECKS OF MATRIX CIRCUITS | .00 | 4.37 | 0 | 0 |
| XII4A | H355 | ISOLATE MALFUNCTIONS WITHIN MINI OR MICRO PROCESSORS TO CARD OR SUBASSEMBLY | 3.50 | 6.11 | 16 | 17 |
| | H360 | PERFORM OPERATIONAL CHECKS OF MINI OR MICRO PROCESSORS USING MAINTENANCE OF CONTROL PANELS | 3.50 | 5.07 | 16 | 17 |
| XIX5C | T692 | ISOLATE MALFUNCTIONS WITHIN PROJECTION DISPLAY EQUIPMENT TO CARD OR SUBASSEMBLY | .00 | 5.78 | 16 | 13 |
| | T684 | ISOLATE MALFUNCTIONS TO PROJECTION DISPLAY EQUIPMENT | .00 | 5.21 | 5 | 4 |
| | T693 | ISOLATE MALFUNCTIONS WITHIN PROJECTION DISPLAY EQUIPMENT TO COMPONENTS | .00 | 6.36 | 16 | 13 |

* High TE rating = 3.56 or higher
** High TD rating = 6.00 or higher

TABLE 33

EXAMPLES OF TASKS NOT REFERENCED IN POI 30534K PERFORMED BY MORE THAN 30 PERCENT OF 30534K COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| K461 | ALIGN CORE MEMORY ASSEMBLIES | 7.00 | 6.29 | 47 | 57 |
| U721 | ISOLATE MALFUNCTIONS WITHIN MODEMS TO COMPONENT | 6.25 | 5.93 | 47 | 52 |
| S649 | DETECT FAULTS WITHIN PRINTERS USING DIAGNOSTIC PROGRAMS | 6.00 | 4.69 | 53 | 57 |
| N553 | ISOLATE MALFUNCTIONS WITHIN REEL TO REEL MAGNETIC TAPE UNITS TO COMPONENT | 5.50 | 6.59 | 53 | 57 |
| S656 | ISOLATE MALFUNCTIONS WITHIN PRINTERS TO COMPONENT | 5.50 | 5.86 | 53 | 57 |
| H346 | DETECT FAULTS WITHIN MAINFRAME PROCESSORS USING OPERATIONAL OR MAINTENANCE CONSOLES | 5.25 | 5.79 | 53 | 61 |
| S658 | PERFORM ELECTRICAL ALIGNMENT OF PRINTERS | 5.25 | 5.55 | 47 | 52 |
| U713 | ALIGN MODEMS | 5.00 | 5.99 | 47 | 57 |
| R629 | ISOLATE MALFUNCTIONS WITHIN TAPE PUNCH EQUIPMENT TO COMPONENT | 4.50 | 5.92 | 42 | 48 |
| V733 | ISOLATE MALFUNCTIONS TO POWER DISTRIBUTION SYSTEMS | 4.25 | 5.07 | 47 | 57 |
| R633 | PERFORM ELECTRICAL ALIGNMENTS OF TAPE READER EQUIPMENT | 4.00 | 5.38 | 53 | 57 |
| T686 | ISOLATE MALFUNCTIONS WITHIN CRT DISPLAY EQUIPMENT TO COMPONENT | 4.00 | 6.24 | 68 | 70 |
| R634 | PERFORM MECHANICAL ALIGNMENTS OF TAPE PUNCH EQUIPMENT | 3.75 | 6.12 | 42 | 52 |
| M520 | ISOLATE MALFUNCTIONS WITHIN MAINTENANCE OR OPERATOR PANELS OR CONSOLES TO COMPONENT | 3.50 | 6.44 | 42 | 39 |
| V735 | ISOLATE MALFUNCTIONS WITHIN POWER SUPPLIES TO COMPONENT IN OFF-EQUIPMENT CONFIGURATION | 3.00 | 6.48 | 47 | 48 |

* High TE rating = 3.56 or higher
** High TD rating = 6.00 or higher

STS 305X4P. Training personnel are encouraged to review both the STS matching section and the tasks not referenced section of the computer printouts accompanying this report as they prepare future revisions to the STS. Analysis indicates that first-enlistment P-shred personnel are performing some tasks related to magnetic disc systems that were not matched to the STS. Analysis also indicates as many as 29 tasks relating to either fixed or mobile switching center equipment, performed by significant percentages of P-shred personnel, are not matched to the STS. There appears to be some justification for creating STS subparagraphs relating to switching equipment circuits. Table 34 lists several of those tasks not referenced and performed by more than 10 percent of the P-shred respondents.

POI 30534P. Table 35 lists examples of the 71 tasks not matched to the 30534P POI and performed by more than 30 percent of the first-job or first-enlistment P-shred personnel. Training personnel should review the entire tasks not referenced section of the computer printout to determine if those high performance tasks, other than electronic or computer principles type tasks, justify course objectives. Some of the performance measured objectives not having matched tasks appear to be matchable, such as CO XVIII/VIII1B with task I393 or CO XIX/IX4B with F239, F245, and F246.

TABLE 34

EXAMPLES OF TASKS NOT REFERENCED IN STS 305X4P PERFORMED BY MORE THAN 10 PERCENT OF 30534P COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| I387 | PERFORM OPERATIONAL CHECKS OF CALL PROCESSING CIRCUITS | 6.58 | 4.87 | 65 | 67 |
| I393 | PERFORM OPERATIONAL CHECKS OF SWITCH MARKER/MATRIX CIRCUITS | 6.50 | 4.93 | 80 | 82 |
| F282 | REMOVE OR REPLACE INTEGRATED CIRCUIT COMPONENTS (CHIPS) | 6.25 | 5.33 | 35 | 36 |
| I392 | PERFORM OPERATIONAL CHECKS OF RAMM INTERFACE CIRCUITS | 6.08 | 4.93 | 31 | 31 |
| F258 | PERFORM CARD TESTER OPERATION TO IDENTIFY FAULTY COMPONENTS | 4.83 | 5.12 | 67 | 69 |
| I389 | PERFORM OPERATIONAL CHECKS OF DSA MARKER CIRCUITS | 4.17 | 4.62 | 15 | 18 |
| S664 | PERFORM PMIs ON PRINTERS | 3.83 | 4.20 | 17 | 18 |
| F219 | CHECK OPERATION OF CIRCUIT CARDS USING TEST BEDS OR TEST FIXTURES | 3.67 | 5.28 | 44 | 44 |
| J422 | ISOLATE MALFUNCTIONS WITHIN REGISTER CIRCUITS | 3.42 | 5.83 | 23 | 22 |
| J404 | DETECT FAULTS WITHIN MARKER CIRCUITS | 3.25 | 5.41 | 27 | 26 |
| J417 | ISOLATE MALFUNCTIONS WITHIN LINE CIRCUITS | 3.17 | 5.44 | 21 | 20 |
| P596 | PERFORM PMIs ON FLOPPY DISC SYSTEMS | 3.08 | 4.29 | 15 | 16 |
| J399 | ALIGN TRUNK CIRCUITS | 2.92 | 5.05 | 14 | 13 |
| J408 | DETECT FAULTS WITHIN REGISTER CIRCUITS | 2.92 | 5.60 | 23 | 22 |
| P603 | REMOVE OR REPLACE SEALED DISC SYSTEM SUBASSEMBLIES | 1.00 | 5.41 | 10 | 9 |

* High TE rating = 3.82 or higher
** High TD rating = 6.00 or higher

TABLE 35

EXAMPLES OF TASKS NOT REFERENCED IN POI 30534P PERFORMED BY MORE THAN 30 PERCENT OF 30534P COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| I386 | PERFORM EMERGENCY RECOVERY PROCEDURES | 7.67 | 5.99 | 85 | 86 |
| I395 | PERFORM PMIs ON AUTOVON SUBSYSTEMS | 6.83 | 4.49 | 92 | 93 |
| I375 | DETECT FAULTS WITHIN SWITCH COMPARATOR CIRCUITS | 6.67 | 5.83 | 83 | 84 |
| I369 | ADJUST LINE OR TRUNK CIRCUITS | 6.58 | 6.17 | 83 | 84 |
| I374 | DETECT FAULTS WITHIN RAPID ACCESS MAINTENANCE MONITOR (RAMM) INTERFACE CIRCUITS | 6.25 | 5.39 | 50 | 51 |
| I382 | ISOLATE MALFUNCTIONS WITHIN RAMM INTERFACE CIRCUITS | 6.08 | 5.82 | 35 | 35 |
| F246 | LOAD PROGRAMS USING PANELS OR CONSOLES | 6.00 | 4.42 | 40 | 44 |
| F240 | LOAD PROGRAMS USING CARTRIDGE DISC | 5.83 | 3.48 | 54 | 53 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 5.50 | 5.18 | 48 | 49 |
| X765 | CROSS-CONNECT INTERMEDIATE AND MAIN FRAMES | 5.17 | 4.80 | 44 | 47 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 5.00 | 4.90 | 60 | 60 |
| F258 | PERFORM CARD TEST OPERATION TO IDENTIFY FAULTY COMPONENTS | 4.83 | 5.12 | 67 | 69 |
| I371 | DETECT FAULTS WITHIN DIAL SERVICE ASSISTANCE (DSA) MARKER CIRCUITS | 4.08 | 5.19 | 29 | 31 |
| K485 | PERFORM PMIs ON CORE MEMORY ASSEMBLIES | 3.92 | 4.43 | 37 | 36 |
| K470 | INTERPRET RESULTS OF MEMORY DIAGNOSTIC PROGRAMS | 3.83 | 5.90 | 31 | 29 |

* High TE rating = 3.82 or higher
** High TD rating = 6.00 or higher

## AN/TTC-30 Electronic Switching Systems Training Documents

STS 305X4Q. Generally, the STS items applicable to the Q-shred are well supported. Percent members performing data matched with paragraphs related to maintenance programming (para 10) was rather low, but first-enlistment training emphasis ratings were high for those tasks. The matching between the STS and job inventory was quite thorough, with only 49 tasks performed by more than 10 percent of the first-job and first-enlistment groups not referenced, and only 19 of those tasks rated high in training emphasis. Table 36 lists examples across the entire range of 49 unmatched tasks.

As recommended in the K-shred STS analysis, data for the Q-shred also supports the inclusion in the STS of tasks related to preparation of equipment for deployment and the installation or removal of mobile equipment.

POI 30534Q. Analysis of the POI for the Q-shred course revealed the occupational survey data was supportive of course objectives. A large portion of the 47 tasks not referenced to the POI and performed by more than 30 percent of the respondents would be matched to the prerequisite electronic and computer principles instruction which is not a part of this analysis. There are, however, several equipment or circuit-unique tasks with both high first-term training emphasis and high percent members performing that should be reviewed for possible inclusion in the ABR course. Table 37 contains examples of those tasks not referenced to the POI.

TABLE 36

EXAMPLES OF TASKS NOT REFERENCED IN STS 305X4Q PERFORMED BY MORE THAN 10 PERCENT OF 30534Q COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| J418 | ISOLATE MALFUNCTIONS WITHIN LINK CIRCUITS | 7.14 | 5.58 | 12 | 13 |
| I376 | DETECT FAULTS WITHIN SWITCH MARKER/MATRIX CIRCUITS | 5.57 | 5.37 | 29 | 28 |
| I384 | ISOLATE MALFUNCTIONS WITHIN SWITCH MARKER/MATRIX CIRCUITS | 5.57 | 5.76 | 18 | 17 |
| I383 | ISOLATE MALFUNCTIONS WITHIN SWITCH COMPARATOR CIRCUITS | 5.14 | 6.01 | 16 | 15 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 4.86 | 5.18 | 65 | 63 |
| J399 | ALIGN TRUNK CIRCUITS | 4.43 | 5.05 | 18 | 17 |
| J412 | ISOLATE MALFUNCTIONS WITHIN C-SUBSETS | 4.43 | 4.20 | 21 | 22 |
| X763 | CONFIGURE ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT OR ACCESSORIES FOR DEPLOYMENT | 4.14 | 6.10 | 24 | 22 |
| J423 | ISOLATE MALFUNCTIONS WITHIN SB-22 SWITCHBOARDS | 3.71 | 4.73 | 14 | 15 |
| J398 | ALIGN LINE CIRCUITS | 3.43 | 5.64 | 18 | 17 |
| J397 | ALIGN INTERFACE CIRCUITS | 3.29 | 5.74 | 14 | 15 |
| X793 | PREPARE MOBILE ELECTRONIC COMPUTER EQUIPMENT FOR DEPLOYMENT | 3.29 | 5.46 | 31 | 30 |
| H345 | DETECT FAULTS WITHIN MAIN FRAME PROCESSORS USING FAULT INDICATORS OR STATUS PANELS | 2.14 | 5.69 | 16 | 15 |
| S649 | DETECT FAULTS WITHIN PRINTERS USING DIAGNOSTIC PROGRAMS | 1.29 | 4.69 | 12 | 11 |
| G310 | DISCRIMINATE BETWEEN HARDWARE AND SOFTWARE FAILURE SOURCES | 1.00 | 7.01 | 16 | 15 |

* High TE rating = 3.60 or higher
** High TD rating = 6.00 or higher

TABLE 37

EXAMPLES OF TASKS NOT REFERENCED IN POI 30534Q PERFORMED BY MORE THAN 30 PERCENT OF 30534Q COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING | |
|---|---|---|---|---|---|
| | | | | 1-30 TICF | 1-48 TICF |
| J426 | ISOLATE MALFUNCTIONS WITHIN TA-341/TT TELEPHONES | 6.43 | 4.96 | 71 | 70 |
| I378 | ISOLATE MALFUNCTIONS WITHIN CALL PROCESSING CIRCUITS | 5.29 | 5.61 | 35 | 33 |
| V733 | ISOLATE MALFUNCTIONS TO POWER DISTRIBUTION SYSTEMS | 4.86 | 5.07 | 33 | 32 |
| J415 | ISOLATE MALFUNCTIONS WITHIN HANDSETS | 4.71 | 4.36 | 59 | 59 |
| J416 | ISOLATE MALFUNCTIONS WITHIN HEADSETS | 4.57 | 4.49 | 57 | 57 |
| J435 | PERFORM OPERATIONAL CHECKS OF HANDSETS | 4.14 | 3.22 | 67 | 65 |
| J436 | PERFORM OPERATIONAL CHECKS OF HEADSETS | 4.14 | 3.22 | 65 | 63 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 3.86 | 4.90 | 31 | 32 |
| J425 | ISOLATE MALFUNCTIONS WITHIN TA-312 TELEPHONES | 3.71 | 4.41 | 55 | 56 |
| J459 | REMOVE OR REPLACE TA-811 TELEPHONE SUPPORT PACKAGES | 3.57 | 3.92 | 57 | 57 |

* High TE rating = 3.60 or higher
** High TD rating = 6.00 or higher

## 472M Computer Maintenance Training Documents

STS 305X4R. Table 38 lists those technical tasks not referenced to the R-shred STS performed by at least 10 percent of the first-enlistment R-shred personnel with average or higher training emphasis ratings. Overall, data matched to the STS was supportive. Subparagraphs pertaining to magnetic drum units and card punches, however, contain tasks performed by very few, if any, of the first-enlistment R-shred personnel and only a small percentage of 5- and 7-skill level respondents.

POI 30534R. Analysis of the ABR30534R POI revealed that survey data was basically supportive of course objectives. Two exceptions were noted. First, tasks relating to coding of software instructions and writing basic program routines were matched to several objectives, while performed by few first-enlistment course graduates (6 to 14 percent). While these may represent a basic need, managers may need to review objectives I5A through I5E (45 hours) for possible course adjustments. A second area that may require review is that relating to paper tape punch and reader operations (objectives III1A through III1C). Tasks matched to these operations have low percent members performing (less than 30), with only average or less than average TE and TD ratings.

Particular emphasis should be placed on reviewing the tasks not referenced to POI objectives to determine if course revision is justified. There were 70 tasks not referenced that received average or above average training emphasis ratings. Fifty-five of these received above average ratings (2.96 or higher, see Table 39 for examples). Eight of these tasks involved maintenance of keyboards or printers, nine related to CRT display equipment, and seven others to power supply or distribution equipment. Those tasks not referenced and not taught in prerequisite training should be evaluated for possible inclusion in the R-shred course.

## Electronic Principles

An additional source of information for 305X4 training managers is the recently completed study of electronic fundamentals required. The electronics principles inventory (EPI) is a knowledge-based job inventory which identifies the range of electronics principles personnel need to perform electronics-oriented jobs. The EPI used in the recent survey, administered from December 1982 through July 1983, contained 1,366 questions in 63 subject areas.

Table 40 displays the percentage of 30554 personnel reporting use of electronics principles as part of their jobs. Subject areas used by 50 percent or more of the 156 5-skill level survey respondents included AC/DC current, meters/multimeters, storage devices, power supplies, logic functions, and input/output devices. Table 40 reflects the varied character of the 305X4 job with 30 subject areas used by 50 percent or more of the 30554 respondents. While some subject areas were used by few 5-skill level personnel, all 63 subject areas reflected some use by career field members. Among the areas

used by few members were electron tubes, time constants, DB and power ratios, microphones and sensing devices, speakers, and AM/FM systems.

More complete EPI data related to the 305X4 career ladder have been sent to the training manager for Basic EP at Keesler for all electronics specialties trained at Keesler. These data may be useful for evaluating electronics-related portions of the ABR courses, as well as the basic EP Fundamentals course.

In summary, this assessment of 305X4 STSs and POIs revealed, that for the most part, those training documents appeared adequate as written. Those tasks not matched to documents, particularly to the POIs, could indicate overlooked matches or a problem suggesting refinements or modifications may be needed. Survey data, along with supporting training extracts, should be reviewed by training managers to determine what changes may be needed to enhance the effectiveness of training.

TABLE 38

EXAMPLES OF TASKS NOT REFERENCED IN STS 305X4R PERFORMED BY MORE THAN 10 PERCENT OF 30534R COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| H358 | LOAD AND OPERATE CPUs WITH OPERATIONAL PROGRAMS | 4.60 | 4.45 | 30 | 33 |
| M513 | BENCH CHECK MAINTENANCE OR OPERATOR PANELS OR CONSOLES | 3.80 | 5.30 | 10 | 8 |
| F270 | PERFORM VISUAL INSPECTIONS OF CABLES, CABLE TROUGHS, OR CONNECTOR AIR DUCTS | 3.00 | 3.12 | 50 | 47 |
| S667 | REMOVE OR REPLACE KEYBOARD SUBASSEMBLIES | 3.00 | 4.35 | 13 | 17 |
| V739 | PERFORM OPERATIONAL CHECKS OF POWER DISTRIBUTION SYSTEMS | 3.00 | 4.43 | 23 | 25 |
| V742 | PERFORM PMIs ON POWER DISTRIBUTION SYSTEMS | 3.00 | 4.01 | 20 | 22 |
| X764 | CONNECT OR DISCONNECT POWER OR EQUIPMENT LEADS | 3.00 | 3.75 | 10 | 8 |
| G310 | DISCRIMINATE BETWEEN HARDWARE AND SOFTWARE FAILURE SOURCES | 2.80 | 7.01 | 33 | 39 |
| F271 | PERFORM VISUAL INSPECTIONS OF NON-ELECTRICAL HARDWARE | 2.60 | 2.87 | 43 | 44 |

* High TE rating = 2.96 or higher
** High TD rating = 6.00 or higher

TABLE 39

EXAMPLES OF TASKS NOT REFERENCED IN STS 30534R PERFORMED BY MORE THAN 30 PERCENT OF 30534R COURSE GRADUATES

| TASKS | | TRAINING EMPHASIS* | TASK DIFFICULTY** | PERCENT MEMBERS PERFORMING 1-30 TICF | PERCENT MEMBERS PERFORMING 1-48 TICF |
|---|---|---|---|---|---|
| T685 | ISOLATE MALFUNCTIONS WITHIN CRT DISPLAY EQUIPMENT TO CARD OR SUBASSEMBLY | 4.80 | 5.85 | 47 | 53 |
| H358 | LOAD AND OPERATE CPUs WITH OPERATIONAL PROGRAMS | 4.60 | 4.45 | 30 | 33 |
| T672 | ALIGN CATHODE RAY TUBE (CRT) DISPLAY EQUIPMENT | 4.60 | 5.83 | 57 | 58 |
| T678 | DETECT FAULTS WITHIN CRT DISPALY EQUIPMENT | 4.60 | 5.27 | 57 | 64 |
| T695 | PERFORM OPERATIONAL CHECKS OF CRT DISPLAY EQUIPMENT | 4.60 | 4.34 | 70 | 69 |
| S647 | DETECT FAULTS WITHIN KEYBOARDS USING DIAGNOSTIC PROGRAMS | 4.40 | 4.85 | 33 | 36 |
| S658 | PERFORM ELECTRICAL ALIGNMENTS OF PRINTERS | 4.40 | 5.55 | 43 | 44 |
| S660 | PERFORM MECHANICAL ALIGNMENTS OF PRINTERS | 4.40 | 6.00 | 53 | 58 |
| V730 | DETECT FAULTS WITHIN POWER SUPPLIES USING FAULT INDICATORS, STATUS PANELS, OR TEST EQUIPMENT | 4.20 | 4.76 | 57 | 61 |
| V728 | DETECT FAULTS WITHIN POWER DISTRIBUTION SYSTEMS USING FAULT INDICATORS, STATUS PANELS, OR TEST EQUIPMENT | 4.00 | 4.75 | 40 | 44 |
| P579 | ALIGN DISC PACK SYSTEMS | 3.60 | 6.26 | 30 | 33 |
| T682 | ISOLATE MALFUNCTIONS TO CRT DISPLAY EQUIPMENT | 3.60 | 5.28 | 70 | 72 |
| S655 | ISOLATE MALFUNCTIONS WITHIN PRINTERS TO CARD OR SUBASSEMBLY | 3.40 | 5.52 | 53 | 56 |
| M519 | ISOLATE MALFUNCTIONS WITHIN MAINTENANCE OR OPERATOR PANELS OR CONSOLES TO CARD OR SUBASSEMBLY | 3.00 | 5.86 | 53 | 53 |
| V733 | ISOLATE MALFUNCTIONS TO POWER DISTRIBUTION SYSTEMS | 3.00 | 5.07 | 33 | 33 |

* High TE rating = 2.96 or higher
** High TD rating = 6.00 or higher

TABLE 40

ELECTRONICS PRINCIPLES INVENTORY (EPI)
PERCENTAGE OF 30554 PERSONNEL USING PRINCIPLES

| SUBJECT AREA | PERCENT USING (N=156) |
|---|---|
| DIRECT CURRENT | 97 |
| METERS/MULTIMETERS | 92 |
| OSCILLOSCOPES | 90 |
| ALTERNATING CURRENT | 86 |
| RESISTANCE AND RESISTIVE CIRCUITS | 86 |
| INPUT/OUTPUT (PERIPHERAL) DEVICES | 86 |
| POWER SUPPLIES | 85 |
| MATHEMATICS | 83 |
| STORAGE DEVICES | 83 |
| SOLDERING OR SOLDERLESS CONNECTIONS | 81 |
| CAPACITORS AND CAPACITIVE REACTANCE | 80 |
| SEMICONDUCTOR DIODES | 80 |
| TRANSISTORS | 80 |
| REGISTERS | 79 |
| LOGIC FUNCTIONS | 78 |
| SOLID-STATE SPECIAL PURPOSE DEVICES | 76 |
| METER MOVEMENTS | 74 |
| COMPUTER, MICROPROCESSORS, AND PROGRAMMING | 72 |
| TIMING CIRCUITS | 69 |
| MULTIVIBRATORS | 69 |
| NUMBERING SYSTEMS | 69 |
| RELAYS | 68 |
| COUNTERS | 65 |
| SPECIAL PURPOSE ELECTRON TUBES | 63 |
| ELECTRON TUBE AMPLIFIERS AND CIRCUITS | 61 |
| TRANSFORMERS | 59 |
| WAVESHAPING CIRCUITS | 55 |
| OSCILLATORS | 53 |
| MOTORS AND GENERATORS | 51 |
| BOOLEAN EQUATIONS | 50 |
| SCHMITT TRIGGERS | 48 |
| INDUCTORS AND INDUCTIVE REACTANCE | 45 |
| FILTERS | 44 |
| RCL CIRCUITS | 40 |
| HETERODYNING AND MODULATION-DEMODULATION (MODEMS) | 38 |
| MAGNETISM | 38 |
| USE OF SIGNAL GENERATORS | 38 |
| DIGITAL-TO-ANALOG/ANALOG-TO-DIGITAL CONVERTERS | 37 |
| LIMITERS AND CLAMPERS | 37 |
| TRANSISTOR AMPLIFIERS | 35 |
| CABLE FABRICATION | 32 |
| PHOTO SENSITIVE DEVICES | 30 |

TABLE 40 (CONTINUED)

ELECTRONICS PRINCIPLES INVENTORY (EPI)
PERCENTAGE OF 30554 PERSONNEL USING PRINCIPLES

| SUBJECT AREA | PERCENT USING (N=156) |
|---|---|
| COUPLING | 29 |
| DB AND POWER RATIOS | 22 |
| TIME CONSTANTS | 20 |
| ELECTRON TUBES | 19 |
| MICROPHONES AND SENSING DEVICES | 12 |
| SPEAKERS | 10 |
| PHANTASTRONS | 7 |
| TRANSMISSION LINES | 7 |
| PULSE MODULATION SYSTEMS | 5 |
| DISPLAY TUBES | 4 |
| FM SYSTEMS | 4 |
| SYNCHRONOUS VIBRATION (CHOPPER CIRCUITS) | 4 |
| INFRARED | 3 |
| TELEVISION | 3 |
| AM SYSTEMS | 2 |
| LASERS | 2 |
| SINGLE OR INDEPENDENT SIDEBAND SYSTEMS | 2 |
| ANTENNAS | 1 |
| MICROWAVE AMPLIFIERS AND OSCILLATORS | 1 |
| WAVEGUIDES AND CAVITY RESONATORS | 1 |

* Percent shown is highest percent reported for a question within the subject area

## ANALYSIS OF CONUS/OVERSEAS GROUPS

Comparisons of the background data and tasks performed were made between 5-skill level personnel assigned within the continental United States (CONUS) and overseas. Five-skill level personnel sampled in CONUS numbered 662, while those overseas totaled 213. The average number of tasks performed by these group members was 117 for the CONUS personnel and 133 for the overseas incumbents. The two groups are nearly equal in all job satisfaction indicators. Fifty-four percent of the CONUS respondents indicated plans to reenlist, while 50 percent of the overseas personnel report intentions to remain in the Air Force. Time in the career field and time in service were slightly higher for the overseas group. Correspondingly, the percentage of first-enlistment personnel is lower in the overseas group (38 percent versus 43 percent for CONUS).

Although many systems were maintained by both groups, some significant differences between the groups (see Table 41) are attributable to the nature of the equipment (overseas AUTOVON) or MAJCOM mission (SACCS or tactical systems). Corresponding differences in tasks performed (see Table 42) are also inherently characteristic of the equipment maintained.

TABLE 41

COMPARISON OF SYSTEMS MAINTAINED BY DAFSC 30554 CONUS AND OVERSEAS PERSONNEL
(PERCENT MEMBERS RESPONDING)

| SYSTEMS MAINTAINED | CONUS MEMBERS (N=662) | OVERSEAS MEMBERS (N=213) |
|---|---|---|
| AUTOVON AND AUTODIN SYSTEMS | | |
| 490L, OVERSEAS AUTOVON | 3 | 29 |
| RAMM, RAPID ACCESS MAINTENANCE MONITOR | 1 | 17 |
| TDCS, TRAFFIC DATA COLLECTION SYSTEM | 1 | 18 |
| CONUS AUTODIN | * | 0 |
| OVERSEAS AUTODIN | * | 7 |
| AIR DEFENSE AND WARNING SYSTEMS | | |
| 427M, NORAD | 6 | * |
| AN/FYQ-7 (SAGE) | 8 | * |
| AN/FYQ-47, SAGE AIR DATA PROCESSOR | 2 | 0 |
| AN/GYQ-18, DIGITAL TV ELEMENT | 4 | 0 |
| SAC SYSTEMS | | |
| 465L, RCC-EDLCC/SACCS | 22 | 4 |
| 465L, EDTCC/SACCS | 8 | * |
| 465L, DISPLAY EQUIPMENT/SACCS | 7 | * |
| IBM-360, SAC SATELLITE TRACKING SYSTEM | 4 | 2 |
| AIRBORNE SYSTEMS AND EQUIPMENT | | |
| E-3A, AWACS SYSTEM | 7 | 5 |
| PACCS, POST ATTACK COMMAND CENTRAL SYSTEM | 1 | 0 |
| AN/UYK-47, GROUND DEVELOPMENT SYSTEM | 2 | 0 |
| TACTICAL OR MOBILE SYSTEMS | | |
| AN/TSQ-91, COMMAND CONTROL SYSTEM | 3 | 9 |
| AN/TCC-22, TELEPHONE CENTRAL | 1 | * |
| AN/TTC-30, ELECTRONIC TELEPHONE CENTRAL OFFICE | 5 | 8 |
| AN/TTC-32, MANUAL SWITCH | 2 | 1 |
| AN/TTC-39, AUTOMATIC CIRCUIT SWITCH | * | 0 |
| AN/TYC-10, MESSAGE PROCESSING CENTER | 1 | 6 |
| AN/TYQ-11, TACTICAL IMAGERY INTERPRETATION | * | 2 |
| AN/TYQ-14, DISPLAY CONTROL STORAGE AND RETRIEVAL SYSTEM | 1 | * |
| AM-4118/407L, TACTICAL AIR CONTROL SYSTEM | 5 | 5 |
| WS-428A, TACTICAL INFORMATION PROCESSING AND INTERPRETATION (TIPI) | 2 | 3 |

* Denotes less than 1 percent

TABLE 42

REPRESENTATIVE TASK DIFFERENCES BETWEEN DAFSC 30554
CONUS AND OVERSEAS PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | | CONUS (N=662) | OVERSEAS (N=213) | DIFF |
|---|---|---|---|---|
| F269 | PERFORM SELF-TEST PROCEDURES ON DRAWER TESTERS | 22 | 7 | +15 |
| N546 | ISOLATE MALFUNCTIONS TO FORMAT MESSAGE COMPOSERS (FMC) | 19 | 4 | +15 |
| U715 | BENCH CHECK MODEMS | 25 | 11 | +14 |
| U717 | DETECT FAULTS WITHIN MODEMS USING FAULT INDICATORS OR STATUS PANELS | 26 | 12 | +14 |
| U721 | ISOLATE MALFUNCTIONS WITHIN MODEMS TO COMPONENT | 23 | 10 | +13 |
| U723 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON MODEMS | 28 | 15 | +13 |
| U720 | ISOLATE MALFUNCTIONS WITHIN MODEMS TO CARD OR SUBASSEMBLY | 26 | 13 | +13 |
| N554 | PERFORM OPERATIONAL CHECKS OF FMCs | 18 | 4 | +13 |
| N550 | ISOLATE MALFUNCTIONS WITHIN FMCs TO CARD OR SUBASSEMBLY | 17 | 4 | +13 |
| N532 | ALIGN FMCs | 17 | 4 | +13 |
| | - - -

AD-A142 545 ELECTRONIC COMPUTER AND SWITCHING SYSTEMS CAREER LADDER AFSC 305X4(U) AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX JUN 84 2/2

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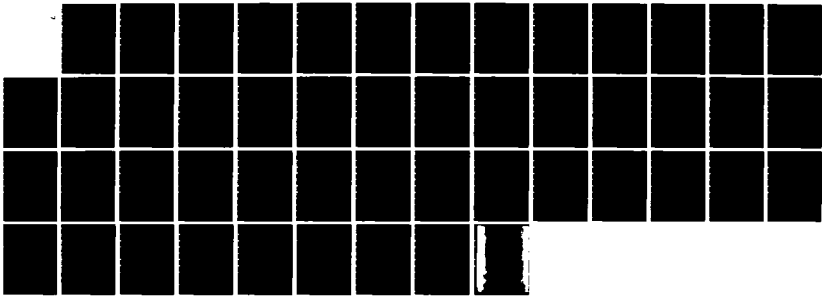

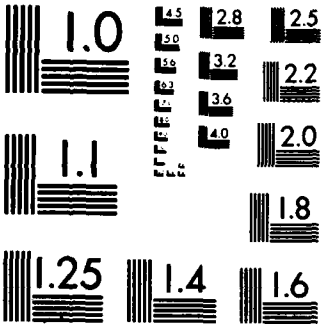


MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

## ANALYSIS OF MAJCOM GROUPS

The background data of and tasks performed by personnel in the seven MAJCOMs with populations above one percent--AFSC, TAC, ATC, ESC, SAC, USAFE, and PACAF--were compared to determine if job content varied as a function of MAJCOM assignment. One of the major reasons for such a comparison is to detect differences across MAJCOMs that might affect structured training programs. Table 43 compares duty differences across MAJCOMs.

Analysis of duties and tasks performed and background data shows that all MAJCOMs generally were similar. The only noteworthy difference is the increase in fixed switching center equipment duties in PACAF, and mobile switching center equipment duties in USAFE and TAC. These duties relate to overseas AUTOVON and tactical telephone equipment maintenance, respectively, which are unique to overseas and tactical organizations. Table 44 reflects the systems maintained by the seven MAJCOM groups.

*TABLE 43*

RELATIVE PERCENT TIME SPENT ON DUTIES BY MAJCOM GROUPS

| DUTIES | AFCC (N=1,112) | TAC (N=412) | ATC (N=105) | ESC (N=84) | SAC (N=56) | USAFE (N=78) | PACAF (N=22) |
|---|---|---|---|---|---|---|---|
| A ORGANIZING AND PLANNING | 4 | 4 | 7 | 7 | 4 | 6 | 2 |
| B DIRECTING AND IMPLEMENTING | 5 | 4 | 7 | 5 | 4 | 6 | 3 |
| C INSPECTING AND EVALUATING | 6 | 5 | 6 | 7 | 5 | 5 | 3 |
| D TRAINING | 4 | 4 | 38 | 3 | 3 | 4 | 3 |
| E MAKING ENTRIES ON FORMS OR RECORDS AND PERFORMING ADMINISTRATIVE AND SUPPORT FUNCTIONS | 14 | 13 | 8 | 16 | 14 | 13 | 9 |
| F PERFORMING ROUTINE, REPAIR FACILITY, OR SYSTEM UNIQUE MAINTENANCE | 22 | 21 | 18 | 17 | 23 | 17 | 25 |
| G MONITORING, OPERATING, AND PROGRAMMING ELECTRONIC COMPUTER AND SWITCHING SYSTEMS | 3 | 3 | 4 | 3 | 4 | 3 | 5 |
| H MAINTAINING CENTRAL PROCESSING UNITS (CPU) | 4 | 5 | 3 | 7 | 4 | 4 | 3 |
| I MAINTAINING FIXED SWITCHING CENTER EQUIPMENT | 2 | * | 1 | * | * | 2 | 11 |
| J MAINTAINING MOBILE SWITCHING CENTER EQUIPMENT | 1 | 5 | * | * | * | 9 | 2 |
| K MAINTAINING MEMORY ASSEMBLIES | 3 | 3 | 2 | 3 | 3 | 2 | 3 |
| L MAINTAINING INPUT/OUTPUT (I/O) ASSEMBLIES, SUCH AS BUFFERS, CONTROLLERS, OR INTERFACES | 2 | 2 | 1 | 3 | 2 | 2 | 2 |
| M MAINTAINING MAINTENANCE OR OPERATOR PANELS OR CONSOLES INCLUDING BUILT-IN TEST EQUIPMENT | 2 | 5 | 1 | 2 | 2 | 3 | 3 |
| N MAINTAINING MAGNETIC TAPE UNITS | 4 | 4 | 1 | 5 | 5 | 3 | 3 |
| O MAINTAINING MAGNETIC DRUM UNITS | * | 2 | * | 0 | * | * | * |
| P MAINTAINING MAGNETIC DISC SYSTEMS | 1 | * | * | 3 | 2 | 1 | 1 |
| Q MAINTAINING CARD PUNCH AND CARD READER EQUIPMENT | 1 | 2 | * | * | 1 | 1 | 1 |
| R MAINTAINING TAPE PUNCH AND TAPE READER EQUIPMENT | 1 | 1 | 1 | 4 | 3 | 1 | 4 |
| S MAINTAINING KEYBOARDS AND PRINTERS | 6 | 4 | 2 | 6 | 6 | 5 | 5 |
| T MAINTAINING DISPLAY EQUIPMENT | 3 | 5 | 1 | 3 | 4 | 3 | 2 |
| U MAINTAINING MODEMS | 3 | 1 | 1 | * | 2 | 2 | * |
| V MAINTAINING POWER SUPPLIES AND POWER DISTRIBUTION SYSTEMS | 6 | 4 | 1 | 4 | 7 | 5 | 7 |
| W MAINTAINING PLOTTERS, SUCH AS XY PLOTTERS | * | * | * | * | * | * | 1 |
| X INSTALLING, MODIFYING, RECONFIGURING, AND MANAGING ELECTRONIC COMPUTER AND SWITCHING SYSTEMS INCLUDING MOBILE EQUIPMENT | 1 | 1 | * | 2 | 1 | 4 | 2 |
| Y MAINTAINING, MONITORING, AND OPERATING AIRBORNE SYSTEMS UNIQUE EQUIPMENT | * | 1 | * | 0 | 1 | * | * |

* Denotes less than 1 percent
NOTE: Columns may not equal 100 percent due to rounding

TABLE 44

COMPARISON OF SYSTEMS MAINTAINED BY DAFSC 305X4 MAJCOM GROUPS
(PERCENT MEMBERS RESPONDING)

| SYSTEMS MAINTAINED | AFCC (N=1,112) | TAC (N=412) | ATC (N=105) | ESC (N=84) | SAC (N=56) | USAFE (N=78) | PACAF (N=22) |
|---|---|---|---|---|---|---|---|
| AUTOVON AND AUTODIN SYSTEMS | | | | | | | |
| 490L, OVERSEAS AUTOVON | 12 | * | 8 | 1 | 0 | 9 | 55 |
| RAMM, RAPID ACCESS MAINTENANCE MONITOR | 7 | * | 4 | 0 | 0 | 6 | 41 |
| TDCS, TRAFFIC DATA COLLECTION SYSTEM | 7 | * | 5 | 0 | 0 | 6 | 41 |
| CONUS AUTODIN | * | 0 | 0 | 0 | 2 | 0 | 0 |
| OVERSEAS AUTODIN | 3 | 0 | 1 | 0 | 2 | 3 | 0 |
| AIR DEFENSE AND WARNING SYSTEMS | | | | | | | |
| 427M, NORAD | 7 | 0 | 4 | 0 | 0 | 0 | 0 |
| AN/FYQ-7, SAGE | * | 32 | 1 | 0 | 0 | 1 | 0 |
| AN/UYK-1, SATDI | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AN/FYQ-47, SAGE AIR DATA PROCESSOR | * | 5 | 1 | 0 | 0 | 0 | 0 |
| AN/GYQ-18, DIGITAL TV ELEMENT | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| SAC SYSTEMS | | | | | | | |
| 465L, RCC-EDLCC/SACCS | 30 | 0 | 7 | 0 | 13 | 0 | 0 |
| 464L, EDTCC/SACCS | 9 | 0 | 3 | 0 | 13 | 0 | 0 |
| 465L, DISPLAY EQUIPMENT/SACCS | 7 | 0 | 3 | 0 | 9 | 0 | 0 |
| IBM-360, SAC SATELLITE TRACKING SYSTEM | 6 | 0 | 3 | 0 | 4 | 0 | 0 |
| AIRBORNE SYSTEMS AND EQUIPMENT | | | | | | | |
| E-3A, AWACS SYSTEM | * | 22 | 5 | 0 | 0 | 3 | 0 |
| PACCS, POST ATTACK COMMAND CONTROL SYSTEM | 0 | 0 | 0 | 0 | 16 | 0 | 0 |
| AN/UYK-47, GROUND DEVELOPMENT SYSTEM | 1 | 0 | 0 | 0 | 11 | 0 | 0 |

TABLE 44 (CONTINUED)

COMPARISON OF SYSTEMS MAINTAINED BY DAFSC 305X4 MAJCOM GROUPS
(PERCENT MEMBERS RESPONDING)

| SYSTEMS MAINTAINED | AFCC (N=1,112) | TAC (N=412) | ATC (N=105) | ESC (N=84) | SAC (N=56) | USAFE (N=78) | PACAF (N=22) |
|---|---|---|---|---|---|---|---|
| TACTICAL OR MOBILE SYSTEMS | | | | | | | |
| AN/FTC-28/29, FIXED TELEPHONE CENTRAL | 0 | * | 0 | 0 | 0 | 4 | 0 |
| AN/TSQ-91, COMMAND CONTROL SYSTEM | 1 | 10 | 1 | 1 | 0 | 37 | 0 |
| AN/TCC-22, TELEPHONE CENTRAL | 2 | 1 | 0 | 1 | 0 | 1 | 0 |
| AN/TTC-30, ELECTRONIC TELEPHONE CENTRAL OFFICE | 3 | 14 | 8 | 1 | 0 | 28 | 0 |
| AN/TTC-32, MANUAL SWITCH | 0 | 4 | 0 | 0 | 0 | 8 | 0 |
| AN/TTC-39, AUTOMATIC CIRCUIT SWITCH | * | 1 | 1 | 0 | 0 | 3 | 0 |
| AN/TYC-10, MESSAGE PROCESSING CENTER | * | 5 | 1 | 0 | 0 | 30 | 5 |
| AN/TYQ-11, TACTICAL IMAGERY INTERPRETATION | 0 | 2 | 2 | 0 | 0 | 9 | 10 |
| AN/TYQ-14, DISPLAY CONTROL STORAGE AND RETRIEVAL SYSTEM | 0 | 4 | 0 | 0 | 0 | 1 | 0 |
| HM-4118/407L, TACTICAL AIR CONTROL SYSTEM | 1 | 11 | 7 | 0 | 0 | 35 | 0 |
| WS-428A, TACTICAL INFORMATION PROCESSING AND INTERPRETATION (TIPI) | 0 | 6 | 9 | 0 | 0 | 12 | 27 |
| OTHER SYSTEMS | 18 | 10 | 20 | 77 | 27 | 10 | 9 |
| NO SPECIFIC SYSTEM | 5 | 3 | 22 | 14 | 20 | 5 | 0 |

* Denotes less than 1 percent

## COMPARISON TO PREVIOUS SURVEY

Results of this survey were compared to the results of OSRs AFPT 90-305-257 (Electronic Computer Systems Career Ladder), dated 30 December 1977, and AFPT 90-362-179 (Electronic Switching Systems Repair Career Ladder), dated 29 August 1975. Comparisons were made to career ladder structures (Table 45) and job satisfaction indicators for first-enlistment groups (Table 46).

The only significant difference in career ladder structure across the three surveys is the current survey (see Table 45), identifies several system specific job types not noted in the previous 305X4 survey. This difference in the career ladder structure may be due to the increase in the number of tasks in the inventory from 577 to 843, or an increase of 46 percent. This increase enables the analyst to identify jobs with more specificity. The shredding of the career ladder at the 3-level in 1978 and 1980 classification changes also seem to have contributed to the new structure. There was an absence in the current study of any group primarily devoted to systems or equipment installation, whereas the 1977 survey had two such jobs, but less than 2 percent of that sample.

Despite some differences in earlier format, indicators of job interest, utilization of talents and training, and reenlistment intentions were reviewed across the three surveys for first-enlistment groups. Job interest and perceived utilization indicators in the current survey reflect a large increase in job satisfaction over both the previous surveys (see Table 46). Positive reenlistment intentions also increased over the 1977 and 1975 groups by 5 and 8 percent, respectively, most likely reflecting overall economic conditions.

TABLE 45

JOB SPECIALTY COMPARISONS ACROSS CURRENT AND PREVIOUS SURVEYS

| 1984 OSR (305X4) | 1977 OSR (305X4) | 1975 OSR (362X2) |
|---|---|---|
| ECSS SHIFT SUPERVISORS (N=86)(I) | COMPUTER SYSTEMS MAINTENANCE SUPERVISORS (N=118)(C) | 490-L MAINTENANCE MANAGERS (N=13)(JT) NCOICs, TTC-30 AND TSQ REPAIR (N=11)(JT) |
| ELECTRONIC COMPUTER SYSTEMS MAINTENANCE PERSONNEL (N=493)(C) | COMPUTER SYSTEMS REPAIRMEN (N=866)(C) | NA* |
| SEMI-AUTOMATIC GROUND ENVIRONMENT (SAGE) SPECIALISTS (N=87)(I) | NI** | NA |
| RCC-EDLCC/SACCS SPECIALISTS (N=64)(I) | NI | NA |
| DATA DISPLAY CENTRAL (DDC/SACCS SPECIALISTS (N=36)(I) | NI | NA |
| AIRBORNE AWACS TECHNICIANS (N=10)(I) | NI | NA |
| AIRBORNE COMMAND POST COMPUTER SPECIALISTS (N=10)(I) | NI | NA |
| COMPUTER ASSISTED FORCE MANAGEMENT SYSTEMS (CAFMS) SPECIALISTS (N=5)(I) | NI | NA |

TABLE 45 (CONTINUED)

JOB SPECIALTY COMPARISONS ACROSS CURRENT AND PREVIOUS SURVEYS

| 1984 OSR (305X4) | 1977 OSR (305X4) | 1975 OSR (362X2) |
|---|---|---|
| GENERAL COMPUTER MAINTENANCE SPECIALISTS (N=24)(I) | GENERAL COMPUTER MAINTENANCE REPAIRMEN (N=10)(I) | NA |
| GENERAL FACILITY MAINTENANCE SPECIALISTS (N=78)(I) | GENERAL FACILITY MAINTENANCE REPAIRMEN (N=25)(I) | SWITCHING CLERKS (N=6)(I) |
| OVERSEAS AUTOVON SWITCH REPAIR SPECIALISTS (N=103)(JT) | NA | AUTOVON SWITCH REPAIRMEN (N=149)(C) |
| TACTICAL CONTROL SWITCH REPAIRMEN (N=101)(JT) | NA | TACTICAL AIR CONTROL CENTER SWITCH REPAIRMEN (N=46)(C) |
| MANAGEMENT PERSONNEL (N=373)(C) | QUALITY CONTROL MONITORS (N=54)(I)<br>COMPUTER SYSTEMS SUPERVISORS/ SUPERINTENDENTS (N=155)(I)<br>MAINTENANCE CONTROLLERS (N=26)(I)<br>COMPUTER SYSTEM CONTROLLERS (N=37)(I)<br>PROGRAM MANAGERS (N=38)(I)<br>LOGISTICS MONITORS (N=15)(I)<br>COMMUNICATIONS JOB CONTROLLERS (N=20)(I)<br>COMPUTER SYSTEMS MONITORS (N=9)(I) | MAINTENANCE MANAGERS (N=6)(JT)<br>SWITCHING SUPERINTENDENTS (N=9)(JT)<br>NCOICs, ELECTRONIC SWITCHING (N=12)(JT)<br>490-L SWITCH SUPERVISORS (N=15)(JT) |
| NI | DEPLOYMENT COMPUTER REPAIRMEN (N=55)(I) | NA |

TABLE 45 (CONTINUED)

JOB SPECIALTY COMPARISONS ACROSS CURRENT AND PREVIOUS SURVEYS

| 1984 OSR (305X4) | 1977 OSR (305X4) | 1975 OSR (362X2) |
|---|---|---|
| NI | COMPUTER SYSTEMS INSTALLERS (N=25)(I) | NA |
| NI | TEST EQUIPMENT MAINTENANCE REPAIRMEN (N=18)(I) | NI |
| NI | COMPUTER EQUIPMENT INSTALLERS (N=15)(I) | NA |
| RESIDENT TRAINING INSTRUCTORS (N=54)(I)<br>*FIELD TRAINING INSTRUCTORS* (N=15)(I) | TECHNICAL TRAINING INSTRUCTORS (N=76)(I) | NI |
| INSTRUCTOR SUPERVISORS (N=10)(I) | TRAINING SUPERVISORS/ SUPERINTENDENTS (N=13)(I) | NI |
| NI | NA | SEVAC REPAIRMEN (N=6)(I) |
| NI | NA | TTC-22 REPAIRMEN (N=10)(I) |

* Not applicable
** Not identifiable

C = Cluster
JT = Job Type Within a Cluster
I = Independent Job Type

TABLE 46

COMPARISON OF JOB SATISFACTION INDICATORS FOR FIRST-ENLISTMENT PERSONNEL FOR CURRENT AND PREVIOUS SURVEYS (PERCENT MEMBERS RESPONDING)*

| | 1-48 MONTHS TAFMS | | |
|---|---|---|---|
| | 305X4 (1984) | 305X4 (1977) | 362X2 (1975) |
| EXPRESSED JOB INTEREST | | | |
| DULL | 9 | 13 | 21 |
| SO-SO | 12 | 19 | 11 |
| INTERESTING | 76 | 67 | 68 |
| PERCEIVED UTILIZATION OF TALENTS | | | |
| LITTLE OR NOT AT ALL | 15 | 28 | 28 |
| FAIRLY WELL TO PERFECTLY | 84 | 72 | 62 |
| PERCEIVED UTILIZATION OF TRAINING | | | |
| LITTLE OR NOT AT ALL | 18 | 31 | 28 |
| FAIRLY WELL TO PERFECTLY | 82 | 68 | 62 |
| REENLISTMENT INTENTIONS | | | |
| NO, OR PROBABLY NO | 57 | 62 | 65 |
| YES, OR PROBABLY YES | 42 | 37 | 34 |

* Columns may not add to 100 percent due to nonresponse or rounding

## IMPLICATIONS

This survey was conducted primarily to provide technical training centers with current information on the Electronic Computer and Switching Systems specialty for use in evaluating the entry-level courses revised as a result of changes in AFR 39-1 in October 1980. Those changes merged the Electronic Switching Systems specialty (formerly 362X2) with the Electronic Computer Systems specialty (305X4). In comparing the current and previous surveys, that classification change has had little impact on the jobs of the career ladder. Although the current survey identified several system specific jobs not identified in the previous 305X4 survey, those systems were maintained by members of a broadly defined group of repairmen.

With the exception of one small job group, no serious job satisfaction problems appear to exist within this specialty. Positive responses to job satisfaction questions were low for the Data Display/SACCS group, but this group accounts for only about two percent of the career field. Overall, job satisfaction responses for the entire sample compared favorably to the comparative sample of Air Force personnel surveyed in 1982.

The analysis of training presented in this report reflects a thorough review of tasks not being trained appears necessary. While the STSs provide good general outlines of the tasks being performed in the specialties, the basic course POIs appear to overlook a significant number of tasks with high percent members performing and high training emphasis ratings. The training analysis did not include a review of prerequisite training; therefore, several tasks not referenced to equipment-specific training indeed may be taught during electronic or computer principles instruction. Training managers should, however, evaluate all tasks not referenced for their respective POIs for possible inclusion in training. Several major areas are suggested for inclusion, indicating the addition of mobility tasks for the K and Q shredouts.

# APPENDIX A

# REPRESENTATIVE TASKS FOR CAREER LADDER STRUCTURE GROUPS



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TABLE A1

ECSS SHIFT SUPERVISORS
(GRP242)

| | TASKS | PERCENT MEMBERS PERFORMING (N=86) |
|---|---|---|
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 98 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 95 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 95 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 94 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 93 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 92 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 91 |
| F281 | REMOVE OR REPLACE FILTERS | 91 |
| A7 | DETERMINE WORK PRIORITIES | 90 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 90 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 88 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 88 |
| E200 | RESEARCH MANUALS FOR PARTS NUMBERS | 87 |
| B34 | COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS | 87 |
| V741 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON POWER SUPPLIES | 87 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 87 |
| D104 | CONDUCT OJT | 86 |
| D107 | DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION | 86 |
| V740 | PERFORM OPERATIONAL CHECKS OF POWER SUPPLIES | 86 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 86 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 86 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 84 |
| D106 | COUNSEL TRAINEES ON TRAINING PROGRESS | 84 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 83 |
| B50 | ORIENT NEWLY ASSIGNED PERSONNEL | 83 |
| V730 | DETECT FAULTS WITHIN POWER SUPPLIES USING FAULT INDICATORS, STATUS PANELS, OR TEST EQUIPMENT | 83 |
| C92 | REVIEW AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 81 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 81 |
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 81 |
| F223 | CLEAN READ/WRITE HEADS | 81 |

TABLE A2

ELECTRONIC COMPUTER SYSTEMS MAINTENANCE PERSONNEL CLUSTER
(GRP259)

| | TASKS | PERCENT MEMBERS PERFORMING (N=493) |
|---|---|---|
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 95 |
| F281 | REMOVE OR REPLACE FILTERS | 93 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 93 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 93 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 92 |
| F223 | CLEAN READ/WRITE HEADS | 91 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 91 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 91 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 90 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 90 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 90 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 89 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 88 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 88 |
| S664 | PERFORM PMI ON PRINTERS | 87 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 87 |
| S649 | DETECT FAULTS WITHIN PRINTERS USING DIAGNOSTIC PROGRAMS | 86 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 86 |
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 85 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 85 |
| F222 | CLEAN OR TREAT FILTERS | 84 |
| S660 | PERFORM MECHANICAL ALIGNMENTS OF PRINTERS | 84 |
| N542 | DETECT FAULTS WITHIN REEL TO REEL MAGNETIC TAPE UNITS USING DIAGONSTIC PROGRAMS | 84 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 84 |
| S655 | ISOLATE MALFUNCTIONS WITHIN PRINTERS TO CARD OR SUBASSEMBLY | 84 |
| L498 | DETECT FAULTS WITHIN BUFFERS, CONTROLLERS, OR INTERFACES USING DIAGNOSTIC PROGRAMS | 83 |
| K470 | INTERPRET RESULTS OF MEMORY DIAGNOSTIC PROGRAMS | 82 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 81 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 81 |
| K483 | PERFORM OPERATIONAL CHECKS OF MEMORY ASSEMBLIES USING DIAGNOSTIC PROGRAMS | 81 |

TABLE A3

TACTICAL INTERPRETATION SYSTEMS REPAIR SPECIALISTS
(GRP576)

| TASKS | | PERCENT MEMBERS PERFORMING (N=25) |
|---|---|---|
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 100 |
| S651 | ISOLATE MALFUNCTIONS TO KEYBOARDS | 100 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 96 |
| N558 | PERFORM PMI ON REEL TO REEL MAGNETIC TAPE UNITS | 96 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 96 |
| S649 | DETECT FAULTS WITHIN PRINTERS USING DIAGNOSTIC PROGRAMS | 96 |
| S661 | PERFORM OPERATIONAL CHECKS OF KEYBOARDS | 96 |
| F281 | REMOVE OR REPLACE FILTERS | 92 |
| N533 | ALIGN REEL TO REEL MAGNETIC TAPE UNITS | 92 |
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 92 |
| S664 | PERFORM PMI ON PRINTERS | 92 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 92 |
| S663 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON KEYBOARDS | 92 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, OR COVERS | 92 |
| T659 | PERFORM OPERATIONAL CHECKS OF CRT DISPLAY EQUIPMENT | 92 |
| P584 | DETECT FAULTS WITHIN DISC PACK SYSTEMS USING DIAGNOSTIC PROGRAMS | 92 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 92 |
| S655 | ISOLATE MALFUNCTIONS WITHIN PRINTERS TO CARD OR SUBASSEMBLY | 92 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 88 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 88 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 88 |
| F247 | LOAD PROGRAMS USING PUNCHED TAPES | 88 |
| P598 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON DISC PACK SYSTEMS | 88 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 88 |
| N547 | ISOLATE MALFUNCTIONS TO REEL TO REEL MAGNETIC TAPE UNITS | 88 |
| F222 | CLEAN OR TREAT FILTERS | 88 |
| R637 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON TAPE PUNCH EQUIPMENT | 88 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 88 |
| S653 | ISOLATE MALFUNCTIONS WITHIN KEYBOARDS TO CARD OR SUBASSEMBLY | 88 |
| R625 | DETECT FAULTS WITHIN TAPE READER EQUIPMENT | 88 |

TABLE A4

INTERMEDIATE COMPUTER MAINTENANCE SPECIALISTS
(GRP748)

| TASKS | | PERCENT MEMBERS PERFORMING (N=89) |
|---|---|---|
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 100 |
| V740 | PERFORM OPERATIONAL CHECKS OF POWER SUPPLIES | 100 |
| F281 | REMOVE OR REPLACE FILTERS | 99 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 99 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 99 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 98 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 97 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 97 |
| F223 | CLEAN READ/WRITE HEADS | 97 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 97 |
| V741 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON POWER SUPPLIES | 97 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 96 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 96 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 96 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 94 |
| S661 | PERFORM OPERATIONAL CHECKS OF KEYBOARDS | 94 |
| T672 | ALIGN CATHODE RAY TUBE (CRT) DISPLAY EQUIPMENT | 94 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OF SWITCHING SYSTEMS EQUIPMENT | 93 |
| K470 | INTERPRET RESULTS OF MEMORY DIAGNOSTIC PROGRAMS | 93 |
| T697 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON CRT DISPLAY EQUIPMENT | 93 |
| T658 | ISOLATE MALFUNCTIONS WITHIN CRT DISPLAY EQUIPMENT TO CARD OR SUBASSEMBLY | 93 |
| L498 | DETECT FAULTS WITHIN BUFFERS, CONTROLLERS, OR INTERFACES USING DIAGNOSTIC PROGRAMS | 93 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 93 |
| V748 | REMOVE OR REPLACE POWER SUPPLY SUBASSEMBLIES | 93 |
| V730 | DETECT FAULTS WITHIN POWER SUPPLIES USING FAULT INDICATORS, STATUS PANELS, OR TEST EQUIPMENT | 93 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 93 |
| S651 | ISOLATE MALFUNCTIONS TO KEYBOARDS | 93 |
| S667 | REMOVE OR REPLACE KEYBOARD SUBASSEMBLIES | 93 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 92 |
| T682 | ISOLATE MALFUNCTIONS TO CRT DISPLAY EQUIPMENT | 92 |

TABLE A5

MAIN FRAME PROCESSORS-DISC SYSTEMS SPECIALISTS
(GRP725)

| TASKS | | PERCENT MEMBERS PERFORMING (N=104) |
|---|---|---|
| F281 | REMOVE OR REPLACE FILTERS | 99 |
| F223 | CLEAN READ/WRITE HEADS | 99 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 99 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 98 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 98 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 98 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 98 |
| S660 | PERFORM MECHNICAL ALIGNMENTS OF PRINTERS | 98 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 98 |
| L498 | DETECT FAULTS WITHIN BUFFERS, CONTROLLERS, OR INTERFACES USING DIAGNOSTIC PROGRAMS | 98 |
| S664 | PERFORM PMIs ON PRINTERS | 97 |
| H347 | DETECT FAULTS WITHIN MAINFRAME PROCESSORS USING DIAGNOSTIC PROGRAMS | 97 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 96 |
| H361 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON MAIN FRAME PROCESSORS | 96 |
| H353 | ISOLATE MALFUNCTIONS WITHIN MAINFRAME PROCESSORS TO CARD OR SUBASSEMBLY | 96 |
| P587 | ISOLATE MALFUNCTIONS TO DISC PACK SYSTEMS | 96 |
| S655 | ISOLATE MALFUNCTIONS WITHIN PRINTERS TO CARD OR SUBASSEMBLY | 96 |
| K470 | INTERPRET RESULTS OF MEMORY DIAGNOSTIC PROGRAMS | 95 |
| P590 | ISOLATE MALFUNCTIONS WITHIN DISC PACK SYSTEMS TO SUBASSEMBLY OR CARD | 95 |
| S669 | REMOVE OR REPLACE PRINTER SUBASSEMBLIES | 95 |
| S658 | PERFORM ELECTRICAL ALIGNMENTS OF PRINTERS | 95 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 95 |
| N542 | DETECT FAULTS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS USING DIAGNOSTIC PROGRAMS | 94 |
| H351 | ISOLATE MALFUNCTIONS TO MAIN FRAME PROCESSORS | 94 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 94 |
| S649 | DETECT FAULTS WITHIN PRINTERS USING DIAGNOSTIC PROGRAMS | 94 |
| L501 | ISOLATE MALFUNCTIONS TO BUFFERS, CONTROLLERS, OR INTERFACES | 94 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 94 |
| P598 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON DISC PACK SYSTEMS | 93 |
| S661 | PERFORM OPERATIONAL CHECKS OF KEYBOARDS | 93 |

TABLE A6

TACTICAL AIR CONTROL SYSTEMS REPAIR SPECIALISTS
(GRP746)

| TASKS | | PERCENT MEMBERS PERFORMING (N=26) |
|---|---|---|
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 100 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 100 |
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 96 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 96 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 96 |
| L498 | DETECT FAULTS WITHIN BUFFERS, CONTROLLERS, OR INTERFACES USING DIAGNOSTIC PROGRAMS | 96 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 96 |
| L502 | ISOLATE MALFUNCTIONS WITHIN BUFFERS, CONTROLLERS, OR INTERFACES TO CARD OR SUBASSEMBLY | 96 |
| S661 | PERFORM OPERATIONAL CHECKS OF KEYBOARDS | 96 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 92 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 92 |
| T685 | ISOLATE MALFUNCTIONS WITHIN CRT DISPLAY EQUIPMENT TO CARD OR SUBASSEMBLY | 92 |
| H353 | ISOLATE MALFUNCTIONS WITHIN MAINFRAME PROCESSORS TO CARD OR SUBASSEMBLY | 92 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 92 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 92 |
| F223 | CLEAN READ/WRITE HEADS | 92 |
| S664 | PERFORM PMI ON PRINTERS | 92 |
| L499 | DETECT FAULTS WITHIN BUFFERS, CONTROLLERS, OR INTERFACES USING FAULT INDICATORS OR STATUS PANELS | 92 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 88 |
| N558 | PERFORM PMI ON REEL-TO-REEL MAGNETIC TAPE UNITS | 88 |
| H347 | DETECT FAULTS WITHIN MAINFRAME PROCESSORS USING DIAGNOSTIC PROGRAMS | 88 |
| T697 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON CRT DISPLAY EQUIPMENT | 88 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 88 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 88 |
| M511 | ALIGN CONSOLES | 88 |
| N552 | ISOLATE MALFUNCTIONS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS TO CARD OR SUBASSEMBLY | 88 |
| N542 | DETECT FAULTS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS USING DIAGNOSTIC PROGRAMS | 88 |
| T695 | PERFORM OPERATIONAL CHECKS OF CRT DISPLAY EQUIPMENT | 88 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 88 |
| H345 | DETECT FAULTS WITHIN MAINFRAME PROCESSORS USING FAULT INDICATORS OR STATUS PANELS | 88 |

TABLE A7

AIR DEFENSE SYSTEMS REPAIR SPECIALISTS
(GRP649)

| TASKS | | PERCENT MEMBERS PERFORMING (N=53) |
|---|---|---|
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 100 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OF SWITCHING SYSTEMS EQUIPMENT | 100 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 100 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 98 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 98 |
| N555 | PERFORM OPERATIONAL CHECKS OF REEL-TO-REEL MAGNETIC TAPE UNITS | 98 |
| N552 | ISOLATE MALFUNCTIONS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS TO CARD OR SUBASSEMBLY | 98 |
| F293 | SOLDER OF DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 98 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 98 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 96 |
| N542 | DETECT FAULTS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS USING DIAGNOSTIC PROGRAMS | 96 |
| F281 | REMOVE OR REPLACE FILTERS | 96 |
| N558 | PERFORM PMI ON REEL-TO-REEL MAGNETIC TAPE UNITS | 94 |
| H361 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON MAINFRAME PROCESSORS | 94 |
| Q618 | PERFORM PMIs ON CARD READER EQUIPMENT | 94 |
| Q606 | DETECT FAULTS WITHIN CARD READER EQUIPMENT | 94 |
| Q608 | ISOLATE MALFUNCTIONS TO CARD READER EQUIPMENT | 94 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 92 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 92 |
| N547 | ISOLATE MALFUNCTIONS TO REEL TO REEL MAGNETIC TAPE UNITS | 92 |
| H353 | ISOLATE MALFUNCTIONS WITHIN MAINFRAME PROCESSORS TO CARD OR SUBASSEMBLY | 92 |
| K485 | PERFORM PMI ON CORE MEMORY ASSEMBLIES | 92 |
| K475 | ISOLATE MALFUNCTIONS WITHIN CORE MEMORY ASSEMBLIES TO CARD OR SUBASSEMBLY | 92 |
| N544 | DETECT FAULTS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS USING OPERATIONAL OR MAINTENANCE CONSOLES | 92 |
| K471 | ISOLATE MALFUNCTIONS TO CORE MEMORY ASSEMBLIES | 92 |
| H351 | ISOLATE MALFUNCTIONS TO MAINFRAME PROCESSORS | 92 |
| N565 | REMOVE OR REPLACE REEL-TO-REEL MAGNETIC TAPE UNIT SUBASSEMBLIES | 92 |
| K466 | DETECT FAULTS WITHIN CORE MEMORY ASSEMBLIES | 92 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 92 |
| V741 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON POWER SUPPLIES | 92 |

TABLE A8

AIRBORNE WARNING AND CONTROL SYSTEM (AWACS) REPAIR SPECIALISTS
(GRP464)

| TASKS | | PERCENT MEMBERS PERFORMING (N=55) |
|---|---|---|
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 100 |
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 98 |
| T658 | ISOLATE MALFUNCTIONS WITHIN CRT DISPLAY EQUIPMENT TO CARD OR SUBASSEMBLY | 98 |
| T682 | ISOLATE MALFUNCTIONS TO CRT DISPLAY EQUIPMENT | 98 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 96 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 96 |
| N564 | REMOVE OR REPLACE REEL-TO-REEL MAGNETIC TAPE UNITS | 96 |
| S670 | REMOVE OR REPLACE PRINTERS | 96 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 ( REPARABLE ITEM PROCESSING TAG) | 95 |
| M515 | DETECT FAULTS WITHIN MAINTENANCE OR OPERATOR PANELS OR CONSOLES | 95 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 93 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OF SWITCHING SYSTEMS EQUIPMENT | 93 |
| T695 | PERFORM OPERATIONAL CHECKS OF CRT DISPLAY EQUIPMENT | 93 |
| N542 | DETECT FAULTS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS USING DIAGNOSTIC PROGRAMS | 93 |
| M516 | ISOLATE MALFUNCTIONS TO MAINTENANCE OR OPERATOR PANELS OR CONSOLES | 93 |
| S668 | REMOVE OR REPLACE KEYBOARDS | 93 |
| S651 | ISOLATE MALFUNCTIONS TO KEYBOARDS | 93 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 91 |
| L502 | ISOLATE MALFUNCTIONS WITHIN BUFFERS, CONTROLLERS, OR INTERFACES TO CARD OR SUBASSEMBLY | 91 |
| T678 | DETECT FAULTS WITHIN CRT DISPLAY EQUIPMENT | 91 |
| N552 | ISOLATE MALFUNCTIONS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS TO CARD OR SUBASSEMBLY | 91 |
| M519 | ISOLATE MALFUNCTIONS WITHIN MAINTENANCE OR OPERATOR PANELS OR CONSOLES TO CARD OR SUBASSEBMLY | 91 |
| M528 | REMOVE OR REPLACE MAINTENANCE OR OPERATORS PANEL OR CONSOLE SUBASSEMBLIES | 91 |
| F223 | CLEAN READ/WRITE HEADS | 89 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 89 |
| L498 | DETECT FAULTS WITHIN BUFFERS, CONTROLLERS, OR INTERFACES USING DIAGNOSTIC PROGRAMS | 89 |
| T703 | REMOVE OR REPLACE CRT DISPLAY EQUIPMENT SUBASSEMBLIES | 89 |
| N533 | ALIGN REEL-TO-REEL MAGNETIC TAPE UNITS | 89 |
| N565 | REMOVE OR REPLACE REEL-TO-REEL MAGNETIC TAPE UNIT SUBASSEMBLIES | 89 |
| M529 | REMOVE OR REPLACE MAINTENANCE OR OPERATOR PANELS OR CONSOLES | 89 |

TABLE A9

427M-CHEYENNE MOUNTAIN COMPLEX TECHNICIANS
(GRP511)

| TASKS | | PERCENT MEMBERS PERFORMING (N=28) |
|---|---|---|
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 100 |
| T697 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON CRT DISPLAY EQUIPMENT | 100 |
| F281 | REMOVE OR REPLACE FILTERS | 100 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 100 |
| T702 | REMOVE OR REPLACE CRT DISPLAY EQUIPMENT | 100 |
| T695 | PERFORM OPERATIONAL CHECKS OF CRT DISPLAY EQUIPMENT | 96 |
| S664 | PERFORM PMI ON PRINTERS | 96 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 96 |
| S668 | REMOVE OR REPLACE KEYBOARDS | 96 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OF SWITCHING SYSTEMS EQUIPMENT | 93 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 93 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 93 |
| H352 | ISOLATE TO MINI OR MICRO PROCESSORS | 93 |
| H350 | DETECT FAULTS WITHIN MINI OR MICRO PROCESSORS USING DIAGNOSTIC PROGRAMS | 93 |
| T682 | ISOLATE MALFUNCTIONS TO CRT DISPLAY EQUIPMENT | 93 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 93 |
| H348 | DETECT FAULTS WITHIN MINI OR MICRO PROCESSORS USING FAULT INDICATORS OR STATUS PANELS | 93 |
| F223 | CLEAN READ/WRITE HEADS | 93 |
| E200 | RESEARCH MANUALS FOR PARTS NUMBERS | 93 |
| S649 | DETECT FAULTS WITHIN PRINTERS USING DIAGNOSTIC PROGRAMS | 93 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 93 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 93 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 93 |
| F222 | CLEAN OR TREAT FILTERS | 89 |
| H355 | ISOLATE MALFUNCTIONS WITHIN MINI OR MICRO PROCESSORS TO CARD OR SUBASSEMBLY | 89 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 89 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 89 |
| H366 | REMOVE OR REPLACE MINI OR MICRO PROCESSOR SUBASSEMBLIES | 89 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 89 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 89 |

TABLE A10

GROUND DEVELOPMENT AND DIGITAL TV SYSTEMS SPECIALISTS
(GRP523)

| TASKS | | PERCENT MEMBERS PERFORMING (N=6) |
|---|---|---|
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 100 |
| F282 | REMOVE OR REPLACE INTEGRATED CIRCUIT COMPONENTS (CHIPS) | 100 |
| T696 | PERFORM OPERATIONAL CHECKS OF LIQUID CRYSTAL LIGHT VALVES | 100 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 100 |
| T674 | ALIGN LIQUID CRYSTAL LIGHT VALVES | 100 |
| F243 | LOAD PROGRAMS USING KEYBOARDS | 100 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 100 |
| K470 | INTERPRET RESULTS OF MEMORY DIAGNOSTIC PROGRAMS | 100 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 100 |
| F222 | CLEAN OR TREAT FILTERS | 100 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 100 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 100 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 100 |
| S649 | DETECT FAULTS WITHIN PRINTERS USING DIAGNOSTIC PROGRAMS | 100 |
| T699 | PERFORM PMIs ON PLASMA DISPLAY EQUIPMENT | 100 |
| F281 | REMOVE OR REPLACE FILTERS | 100 |
| F223 | CLEAN READ/WRITE HEADS | 100 |
| N533 | ALIGN REEL TO REEL MAGNETIC TAPE UNITS | 100 |
| F233 | INTERPRET WIRING DIAGRAMS FOR INTER OR INTRA UNIT DATA FLOW | 100 |
| M515 | DETECT FAULTS WITHIN MAINTENANCE OR OPERATOR PANELS OR CONSOLES | 100 |
| F295 | SOLDER OR DESOLDER SINGLE LAYER CIRCUIT BOARDS USING PACE KITS | 100 |
| F277 | REMOVE OR REPLACE CIRCUIT CARD COMPONENTS SOCKETS OR WIRE WRAPS | 100 |
| S650 | DETECT FAULTS WITHIN PRINTERS USING FAULT INDICATORS OR STATUS PANELS | 100 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 100 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 100 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 100 |
| E187 | MAKE ENTRIES ON DD FORMS 1574 (SERVICEABLE TAG-MATERIEL) | 83 |
| K483 | PERFORM OPERATIONAL CHECKS OF MEMORY ASSEMBLIES USING DIAGNOSTIC PROGRAMS | 83 |
| V740 | PERFORM OPERATIONAL CHECKS OF POWER SUPPLIES | 83 |
| N558 | PERFORM PMIs ON REEL TO REEL MAGNETIC TAPE UNITS | 83 |

TABLE A11

CARD PUNCH/CARD READER EQUIPMENT REPAIRMENT
(GRP347)

| TASKS | | PERCENT MEMBERS PERFORMING (N=10) |
|---|---|---|
| Q615 | PERFORM MECHANICAL ALIGNMENTS OF CARD PUNCH EQUIPMENT | 100 |
| S664 | PERFORM PMI ON PRINTERS | 100 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 100 |
| A602 | ISOLATE MALFUNCTIONS TO CARD PUNCH EQUIPMENT | 100 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 100 |
| Q606 | DETECT FAULTS WITHIN CARD READER EQUIPMENT | 100 |
| Q609 | ISOLATE MALFUNCTIONS WITHIN CARD PUNCH EQUIPMENT TO CARD OR SUBASSEMBLY | 100 |
| Q621 | REMOVE OR REPLACE CARD PUNCH OR CARD READER MECHANICAL EQUIPMENT COMPONENTS | 100 |
| Q608 | ISOLATE MALFUNCTIONS TO CARD READER EQUIPMENT | 100 |
| N542 | DETECT FAULTS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS USING DIAGNOSTIC PROGRAMS | 100 |
| N552 | ISOLATE MALFUNCTIONS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS TO CARD OR SUBASSEMBLY | 100 |
| Q614 | PERFORM ELECTRICAL ALIGNMENTS OF CARD READER EQUIPMENT | 100 |
| Q613 | PERFORM ELECTRICAL ALIGNMENTS OF CARD PUNCH EQUIPMENT | 100 |
| S658 | PERFORM ELECTRICAL ALIGNMENTS OF PRINTERS | 100 |
| F239 | LOAD PROGRAMS USING CARDS | 90 |
| Q617 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON CARD PUNCH EQUIPMENT | 90 |
| Q618 | PERFORM PMI ON CARD READER EQUIPMENT | 90 |
| S649 | DETECT FAULTS WITHIN PRINTERS USING DIAGNOSTIC PROGRAMS | 90 |
| P598 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON DISC PACK SYSTEMS | 90 |
| N558 | PERFORM PMI ON REEL-TO-REEL MAGNETIC TAPE UNITS | 90 |
| Q611 | ISOLATE MALFUNCTIONS WITHIN CARD READER EQUIPMENT TO CARD OR SUBASSEMBLY | 90 |
| S660 | PERFORM MECHANICAL ALIGNMENTS OF PRINTERS | 90 |
| Q616 | PERFORM MECHANICAL ALIGNMENTS OF CARD READER EQUIPMENT | 90 |
| P579 | ALIGN DISC PACK SYSTEMS | 90 |
| P587 | ISOLATE MALFUNCTIONS TO DISC PACK SYSTEMS | 90 |
| P584 | DETECT FAULTS WITHIN DISC PACK SYSTEMS USING DIAGNOSTIC PROGRAMS | 90 |
| N543 | DETECT FAULTS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS USING FAULT INDICATORS OR STATUS PANELS | 90 |
| Q623 | REMOVE OR REPLACE CARD READER EQUIPMENT SUBASSEMBLIES | 90 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 90 |
| F222 | CLEAN OR TREAT FILTERS | 80 |

TABLE A12

COMPUTER OPERATOR-MAINTAINERS
(GRP366)

| TASKS | | PERCENT MEMBERS PERFORMING (N=22) |
|---|---|---|
| P598 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON DISC PACK SYSTEMS | 100 |
| S663 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON KEYBOARDS | 100 |
| S655 | ISOLATE MALFUNCTIONS WITHIN PRINTERS TO CARD OR SUBASSEMBLY | 100 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 95 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 95 |
| S658 | PERFORM ELECTRICAL ALIGNMENTS OF PRINTERS | 95 |
| P587 | ISOLATE MALFUNCTIONS TO DISC PACK SYSTEMS | 95 |
| S664 | PERFORM PMI ON PRINTERS | 91 |
| F223 | CLEAN READ/WRITE HEADS | 91 |
| F281 | REMOVE OR REPLACE FILTERS | 91 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 91 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 91 |
| P599 | REMOVE OR REPLACE DISC PACK SYSTEM SUBASSEMBLIES | 91 |
| P584 | DETECT FAULTS WITHIN DISC PACK SYSTEMS USING DIAGNOSTIC PROGRAMS | 91 |
| S660 | PERFORM MECHANICAL ALIGNMENTS OF PRINTERS | 91 |
| S669 | REMOVE OR REPLACE PRINTER SUBASSEMBLIES | 91 |
| P590 | ISOLATE MALFUNCTIONS WITHIN DISC PACK SYSTEMS TO SUBASSEMBLY OR CARD | 91 |
| S653 | ISOLATE MALFUNCTIONS WITHIN KEYBOARDS TO CARD OR SUBASSEMBLY | 91 |
| N558 | PERFORM PMI ON REEL-TO-REEL MAGNETIC TAPE UNITS | 86 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OF SWITCHING SYSTEMS EQUIPMENT | 86 |
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 86 |
| F222 | CLEAN OR TREAT FILTERS | 86 |
| V741 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON POWER SUPPLIES | 86 |
| H355 | ISOLATE MALFUNCTIONS WITHIN MINI OR MICRO PROCESSORS TO CARD OR SUBASSEMBLY | 86 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 86 |
| P579 | ALIGN DISC PACK SYSTEMS | 86 |
| N542 | DETECT FAULTS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS USING DIAGNOSTIC PROGRAMS | 86 |
| S651 | ISOLATE MALFUNCTIONS TO KEYBOARDS | 86 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 82 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 82 |

TABLE A13

TAPE PUNCH/TAPE READER EQUIPMENT REPAIRMENT
(GRP285)

| TASKS | | PERCENT MEMBERS PERFORMING (N=28) |
|---|---|---|
| R637 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON TAPE PUNCH EQUIPMENT | 100 |
| R638 | PERFORM PMI ON TAPE READER EQUIPMENT | 100 |
| R635 | DETECT FAULTS WITHIN TAPE READER EQUIPMENT | 100 |
| R624 | DETECT FAULTS WITHIN TAPE PUNCH EQUIPMENT | 100 |
| F247 | LOAD PROGRAMS USING PUNCHED TAPES | 96 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 96 |
| R627 | ISOLATE MALFUNCTIONS TO TAPE READER EQUIPMENT | 96 |
| R628 | ISOLATE MALFUNCTIONS WITHIN TAPE PUNCH EQUIPMENT TO CARD OR SUBASSEMBLY | 96 |
| R626 | ISOLATE MALFUNCTIONS TO TAPE PUNCH EQUIPMENT | 96 |
| R630 | ISOLATE MALFUNCTIONS WITHIN TAPE READER EQUIPMENT TO CARD OR SUBASSEMBLY | 96 |
| R636 | PERFORM OPERATIONAL CHECKS OF TAPE PUNCH EQUIPMENT | 96 |
| R634 | PERFORM MECHANICAL ALIGNMENTS OF TAPE PUNCH EQUIPMENT | 96 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 93 |
| R635 | PERFORM MECHANICAL ALIGNMENTS OF TAPE READER EQUIPMENT | 89 |
| R633 | PERFORM ELECTRICAL ALIGNMENTS OF TAPE READER EQUIPMENT | 89 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 89 |
| F281 | REMOVE OR REPLACE FILTERS | 89 |
| S664 | PERFORM PMI ON PRINTERS | 86 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 86 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 86 |
| R632 | PERFORM ELECTRICAL ALIGNMENTS OF TAPE PUNCH EQUIPMENT | 86 |
| R642 | REMOVE OR REPLACE TAPE PUNCH OR TAPE READER MECHANICAL EQUIPMENT COMPONENTS | 86 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 86 |
| K483 | PERFORM OPERATIONAL CHECKS OF MEMORY ASSEMBLIES USING DIAGNOSTIC PROGRAMS | 82 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 82 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 82 |
| H347 | DETECT FAULTS WITHIN MAINFRAME PROCESSORS USING DIAGNOSTIC PROGRAMS | 82 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 82 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 82 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 82 |

TABLE A14

AIRBORNE COMMAND POST COMPUTER SPECIALIST
(GRP279)

| TASKS | | PERCENT MEMBERS PERFORMING (N=10) |
|---|---|---|
| N537 | DETECT FAULTS WITHIN CARTRIDGE OR CASSETTE MAGNETIC TAPE UNITS USING DIAGNOSTIC PROGRAMS | 100 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 100 |
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 100 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 100 |
| N560 | REMOVE OR REPLACE CARTRIDGE OR CASSETTE MAGNETIC TAPE UNITS | 100 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 100 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 100 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 100 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OF SWITCHING SYSTEMS EQUIPMENT | 100 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 100 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 100 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 100 |
| F270 | PERFORM VISUAL INSPECTION OF CABLES, CABLE TROUGHS, OR CONNECTOR AIR DUCTS | 100 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 100 |
| B50 | ORIENT NEWLY ASSIGNED PERSONNEL | 100 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 100 |
| N531 | ALIGN CARTRIDGE OR CASSETTE MAGNETIC TAPE UNITS | 90 |
| N534 | BENCH CHECK CARTRIDGE OR CASSETTE MAGNETIC TAPE UNITS | 90 |
| N548 | ISOLATE MALFUNCTIONS WITHIN CARTRIDGE OR CASSETTE MAGNETIC TAPE UNITS TO CARD OR SUBASSEMBLY | 90 |
| N557 | PERFORM PMI ON CARTRIDGE OR CASSETTE MAGNETIC TAPE UNITS | 90 |
| F282 | REMOVE OR REPLACE INTEGRATED CIRCUIT COMPONENTS (CHIPS) | 90 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 90 |
| N561 | REMOVE OR REPLACE CARTRIDGE OR CASSETTE MAGNETIC TAPE UNIT SUBASSEMBLIES | 90 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 90 |
| F223 | CLEAN READ/WRITE HEADS | 90 |
| S664 | PERFORM PMIs ON PRINTERS | 90 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 90 |
| S661 | PERFORM OPERATIONAL CHECKS OF KEYBOARDS | 90 |
| F295 | SOLDER OR DESOLDER SINGLE LAYER CIRCUIT BOARDS USING PACE KITS | 90 |
| S649 | DETECT FAULTS WITHIN PRINTERS USING DIAGNOSTIC PROGRAMS | 90 |

TABLE A15

RCC-EDLCC/SACCS SPECIALISTS
(GRP208)

| TASKS | | PERCENT MEMBERS PERFORMING (N=242) |
|---|---|---|
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 98 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 95 |
| F281 | REMOVE OR REPLACE FILTERS | 95 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 94 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 94 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 93 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 92 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OF SWITCHING SYSTEMS EQUIPMENT | 92 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 91 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 90 |
| F260 | PERFORM DRAWER TESTER OPERATION TO IDENTIFY FAULTY CARD UNDER TEST | 90 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 89 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 88 |
| F269 | PERFORM SELF-TEST PROCEDURES ON DRAWER TESTERS | 88 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 88 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 87 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 87 |
| S664 | PERFORM PMI ON PRINTERS | 87 |
| V741 | PERFORM PREVENTIVE MAINTENANCE INSPECTION (PMI) ON POWER SUPPLIES | 85 |
| F222 | CLEAN OR TREAT FILTERS | 85 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 84 |
| S670 | REMOVE OR REPLACE PRINTERS | 84 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 83 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 82 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 82 |
| S646 | BENCH CHECK PRINTERS | 81 |
| V740 | PERFORM OPERATIONAL CHECKS OF POWER SUPPLIES | 81 |
| F223 | CLEAN READ/WRITE HEADS | 79 |
| F258 | PERFORM CARD TESTER OPERATION TO IDENTIFY FAULTY COMPONENTS | 79 |
| S668 | REMOVE OR REPLACE KEYBOARDS | 79 |

TABLE A16

EDTCC/SACCS SPECIALISTS
(GRP196)

| TASKS | | PERCENT MEMBERS PERFORMING (N=64) |
|---|---|---|
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 95 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 95 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 94 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 94 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 94 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 92 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 92 |
| F281 | REMOVE OR REPLACE FILTERS | 91 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 89 |
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 88 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 88 |
| F282 | REMOVE OR REPLACE INTEGRATED CIRCUIT COMPONENTS (CHIPS) | 88 |
| F223 | CLEAN READ/WRITE HEADS | 86 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 84 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 83 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 83 |
| V741 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON POWER SUPPLIES | 83 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 81 |
| N558 | PERFORM PMI ON REEL-TO-REEL MAGNETIC TAPE UNITS | 80 |
| F239 | LOAD PROGRAMS USING CARDS | 80 |
| N533 | ALIGN REEL-TO-REEL MAGNETIC TAPE UNITS | 78 |
| F222 | CLEAN OR TREAT FILTERS | 77 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 75 |
| F246 | LOAD PROGRAMS USING PANELS OR CONSOLES | 73 |
| U715 | BENCH CHECK MODEMS | 72 |
| U720 | ISOLATE MALFUNCTIONS WITHIN MODEMS TO CARD OR SUBASSEMBLY | 72 |
| U721 | ISOLATE MALFUNCTIONS WITHIN MODEMS TO COMPONENT | 72 |
| U723 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON MODEMS | 70 |
| U713 | ALIGN MODEMS | 70 |
| U719 | ISOLATE MALFUNCTIONS TO MODEMS | 70 |

TABLE A17

CAFMS SPECIALISTS
(GRP220)

| TASKS | | PERCENT MEMBERS PERFORMING (N=5) |
|---|---|---|
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 100 |
| G321 | OPERATE KEYBOARDS OTHER THAN FOR AIRBORNE SYSTEMS | 100 |
| S670 | REMOVE OR REPLACE PRINTERS | 100 |
| X772 | FABRICATE OR MODIFY CABLE INSTALLATIONS | 100 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 100 |
| F243 | LOAD PROGRAMS USING KEYBOARDS | 100 |
| F277 | REMOVE OR REPLACE CIRCUIT CARD COMPONENT SOCKETS OR WIRE WRAPS | 100 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 100 |
| G301 | COORDINATE COMPUTER SYSTEM FUNCTIONAL REQUIREMENTS WITH USERS | 100 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 100 |
| S646 | BENCH CHECK PRINTERS | 100 |
| s655 | ISOLATE MALFUNCTIONS *WITHIN* PRINTERS TO CARD OR SUBASSEMBLY | 100 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 100 |
| S652 | ISOLATE MALFUNCTIONS TO PRINTERS | 100 |
| X764 | CONNECT OR DISCONNECT POWER OR EQUIPMENT LEADS | 100 |
| G310 | DISCRIMINATE BETWEEN HARDWARE AND SOFTWARE FAILURE SOURCES | 100 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 100 |
| G302 | COORDINATE COMPUTER SYSTEM INTERFACE AND INTEGRATION REQUIREMENTS WITH USERS | 100 |
| S668 | REMOVE OR REPLACE KEYBOARDS | 100 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 100 |
| T695 | PERFORM OPERATIONAL CHECKS OF CRT DISPLAY EQUIPMENT | 100 |
| P588 | ISOLATE MALFUNCTIONS TO FLOPPY DISC SYSTEMS | 100 |
| S669 | REMOVE OR REPLACE PRINTER SUBASSEMBLIES | 100 |
| P602 | REMOVE OR REPLACE FLOPPY DISC SYSTEMS | 100 |
| S645 | BENCH CHECK KEYBOARDS | 100 |
| T685 | ISOLATE MALFUNCTIONS WITHIN CRT DISPLAY EQUIPMENT TO CARD OR SUBASSEMBLY | 100 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 100 |
| F242 | LOAD PROGRAMS USING FLOPPY DISCS | 80 |
| U725 | REMOVE OR REPLACE MODEMS | 80 |
| F264 | PERFORM PATCH PANEL OPERATIONS | 80 |

TABLE A18

GENERAL COMPUTER MAINTENANCE SPECIALISTS
(GRP132)

| TASKS | | PERCENT MEMBERS PERFORMING (N=24) |
|---|---|---|
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 96 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 92 |
| F222 | CLEAN OR TREAT FILTERS | 92 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 88 |
| F281 | REMOVE OR REPLACE FILTERS | 88 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 83 |
| F223 | CLEAN READ/WRITE HEADS | 83 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 83 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 79 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 75 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 75 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 75 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 75 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 71 |
| S663 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON KEYBOARDS | 67 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 67 |
| K470 | INTERPRET RESULTS OF MEMORY DIAGNOSTIC PROGRAMS | 63 |
| E133 | ESCORT VISTORS THROUGH FACILITIES | 63 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 63 |
| G321 | OPERATE KEYBOARDS OTHER THAN FOR AIRBORNE SYSTEMS | 58 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 58 |
| S661 | PERFORM OPERATIONAL CHECKS OF KEYBOARDS | 58 |
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 58 |
| S651 | ISOLATE MALFUNCTIONS TO KEYBOARDS | 58 |
| E200 | RESEARCH MANUALS FOR PARTS NUMBERS | 58 |
| H358 | LOAD AND OPERATE CPUs WITH OPERATIONAL PROGRAMS | 54 |
| T697 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON CRT DISPLAY EQUIPMENT | 54 |
| F241 | LOAD PROGRAMS USING DISC PACKS | 54 |
| S664 | PERFORM PMI ON PRINTERS | 54 |
| H355 | ISOLATE MALFUNCTIONS WITHIN MINI OR MICRO PROCESSORS TO CARD OR SUBASSEMBLY | 54 |

TABLE A19

SAGE SPECIALISTS
(GRP110)

| TASKS | | PERCENT MEMBERS PERFORMING (N=87) |
|---|---|---|
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 93 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 85 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 85 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 84 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 80 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 79 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 78 |
| F239 | LOAD PROGRAMS USING CARDS | 78 |
| T695 | PERFORM OPERATIONAL CHECKS OF CRT DISPLAY EQUIPMENT | 76 |
| T672 | ALIGN CATHODE RAY TUBE (CRT) DISPLAY EQUIPMENT | 76 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 76 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 76 |
| T685 | ISOLATE MALFUNCTIONS WITHIN CRT DISPLAY EQUIPMENT TO CARD OR SUBASSEMBLY | 75 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 75 |
| T682 | ISOLATE MALFUNCTIONS TO CRT DISPLAY EQUIPMENT | 74 |
| T703 | REMOVE OR REPLACE CRT DISPLAY EQUIPMENT SUBASSEMBLIES | 72 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 69 |
| T697 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON CRT DISPLAY EQUIPMENT | 67 |
| T678 | DETECT FAULTS WITHIN CRT DISPLAY EQUIPMENT | 67 |
| M511 | ALIGN CONSOLES | 66 |
| F244 | LOAD PROGRAMS USING MAGNETIC DRUMS | 64 |
| T702 | REMOVE OR REPLACE CRT DISPLAY EQUIPMENT | 62 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 62 |
| F223 | CLEAN READ/WRITE HEADS | 62 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 60 |
| F281 | REMOVE OR REPLACE FILTERS | 59 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 57 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 56 |
| M515 | DETECT FAULTS WITHIN MAINTENANCE OR OPERATOR PANELS OR CONSOLES | 54 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 54 |

TABLE A20

DDC/SACCS SPECIALISTS
(GRP205)

| TASKS | | PERCENT MEMBERS PERFORMING (N=36) |
|---|---|---|
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 97 |
| T673 | ALIGN FLUID DISTRIBUTION SYSTEMS | 94 |
| T711 | REMOVE OR REPLACE XENON LAMPS IN PROJECTION DISPLAY EQUIPMENT | 94 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 94 |
| T708 | REMOVE OR REPLACE PROCESSING MATERIALS, SUCH AS FILM, CHEMICALS, OR OILS | 92 |
| T698 | PERFORM PMIs ON FLUID DISTRIBUTION SYSTEMS | 92 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 92 |
| T687 | ISOLATE MALFUNCTIONS WITHIN FLUID DISTRIBUTION SYSTEMS | 89 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 89 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OF SWITCHING SYSTEMS EQUIPMENT | 89 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 89 |
| F293 | *SOLDER OR DESOLDER* ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 89 |
| T692 | ISOLATE MALFUNCTIONS WITHIN PROJECTION DISPLAY EQUIPMENT TO CARD OR SUBASSEMBLY | 89 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 86 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 83 |
| V747 | REMOVE OR REPLACE POWER SUPPLIES | 83 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 83 |
| F281 | REMOVE OR REPLACE FILTERS | 83 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 83 |
| T681 | DETECT FAULTS WITHIN PROJECTION DISPLAY EQUIPMENT | 81 |
| T676 | ALIGN PROJECTION DISPLAY EQUIPMENT | 81 |
| T709 | REMOVE OR REPLACE PROJECTION DISPLAY EQUIPMENT SUBASSEMBLIES | 81 |
| T704 | REMOVE OR REPLACE FLUID DISTRIBUTION SYSTEM COMPONENTS | 81 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 81 |
| T693 | ISOLATE MALFUNCTIONS WITHIN PROJECTION DISPLAY EQUIPMENT TO COMPONENT | 78 |
| T672 | ALIGN CATHODE RAY TUBE (CRT) DISPLAY EQUIPMENT | 78 |
| F271 | PERFORM VISUAL INSPECTIONS OF NONELECTRICAL HARDWARE | 75 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 72 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 72 |
| T695 | PERFORM OPERATIONAL CHECKS OF CRT DISPLAY EQUIPMENT | 72 |

TABLE A21

AIRBORNE AWACS TECHNICIANS
(GRP300)

| TASKS | | PERCENT MEMBERS PERFORMING (N=10) |
|---|---|---|
| Y834 | PREFLIGHT AWACS COMMUNICATIONS AND DATA PROCESSING EQUIPMENT | 100 |
| F254 | PERFORM AIRCRAFT PREFLIGHT INSPECTIONS | 100 |
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 100 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 100 |
| Y829 | PERFORM OPERATIONAL CHECKS OF AWACS ON-LINE OR OFF-LINE BUILT-IN TEST EQUIPMENT | 100 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 100 |
| Y807 | DETECT FAULTS WITHIN AWACS INTERFACE EQUIPMENT | 100 |
| Y823 | MONITOR OPERATION OF AWACS SYSTEMS POWER SUPPLIES | 100 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 100 |
| Y808 | DETECT FAULTS WITHIN AWACS LRUs | 100 |
| F255 | PERFORM AIRCREW EMERGENCY PROCEDURES | 100 |
| O575 | PERFORM PREFLIGHT INSPECTIONS OF MAGNETIC DRUM UNITS | 100 |
| N559 | PERFORM PREFLIGHT INSPECTIONS OF REEL-TO-REEL MAGNETIC TAPE UNITS | 100 |
| Y813 | ISOLATE AWACS INTERFACE EQUIPMENT MALFUNCTIONS | 100 |
| O569 | DETECT FAULTS WITHIN MAGNETIC DRUM UNITS USING FAULT INDICATORS OR STATUS PANELS | 100 |
| S665 | PERFORM PREFLIGHT INSPECTIONS ON KEYBOARDS | 100 |
| Y825 | OPERATE AWACS DATA PROCESSING SYSTEMS (DPS) | 90 |
| G329 | PERFORM MISSION PLANNING | 90 |
| F256 | PERFORM ANNUAL AIRCREW GROUND TRAINING AND CERTIFICATION REQUIREMENTS | 90 |
| Y827 | PERFORM MANUAL CABLE RECONFIGURATION IN SUPPORT OF AWACS INFLIGHT MAINTENANCE | 90 |
| H358 | LOAD AND OPERATE CPUs WITH OPERATIONAL PROGRAMS | 80 |
| E151 | MAINTAIN STANDARD AIR FORCE PUBLICATIONS, REGULATIONS, OR MANUALS | 80 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 80 |
| G313 | INTERPRET COMPUTER CODES | 80 |
| N555 | PERFORM OPERATIONAL CHECKS OF REEL TO REEL MAGNETIC TAPE UNITS | 80 |
| M524 | PERFORM PREFLIGHT INSPECTIONS OF MAINTENANCE OR OPERATOR PANEL OR CONSOLES | 80 |
| N543 | DETECT FAULTS WITHIN REEL-TO-REEL MAGNETIC TAPE UNITS USING FAULT INDICATORS OR STATUS PANELS | 80 |
| O570 | DETECT FAULTS WITHIN MAGNETIC DRUM UNITS USING OPERATIONAL OR MAINTENANCE CONSOLES | 80 |
| S666 | PERFORM PREFLIGHT INSPECTIONS ON PRINTERS | 80 |
| S662 | PERFORM OPERATIONAL CHECKS OF PRINTERS | 80 |

TABLE A22

FIELD TRAINING INSTRUCTORS
(GRP105)

| TASKS | | PERCENT MEMBERS PERFORMING (N=15) |
|---|---|---|
| D126 | WRITE TEST QUESTIONS | 100 |
| D100 | ADMINISTER TESTS | 100 |
| D122 | PREPARE LESSON PLANS | 100 |
| D125 | SCORE TESTS | 100 |
| D103 | CONDUCT CLASSROOM TRAINING OTHER THAN FOR OJT | 93 |
| D111 | DEVELOP TRAINING AIDS | 93 |
| D110 | DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS | 87 |
| D106 | COUNSEL TRAINEES ON TRAINING PROGRESS | 87 |
| D116 | EVALUATE RESIDENT COURSE STUDENT PROGRESS | 80 |
| D124 | PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT | 80 |
| K483 | PERFORM OPERATIONAL CHECKS OF MEMORY ASSEMBLIES USING DIAGNOSTIC PROGRAMS | 73 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 73 |
| D117 | EVALUATE TRAINING METHODS OR TECHNIQUES | 73 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 73 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 73 |
| H357 | LOAD AND OPERATE CENTRAL PROCESSING UNITS (CPU) WITH DIAGNOSTIC PROGRAMS | 73 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 73 |
| D107 | DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION | 73 |
| H350 | DETECT FAULTS WITHIN MINI OR MICRO PROCESSORS USING DIAGNOSTIC PROGRAMS | 67 |
| G321 | OPERATE KEYBOARDS OTHER THAN FOR AIRBORNE SYSTEMS | 67 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 67 |
| F245 | LOAD PROGRAMS USING MAGNETIC TAPES | 67 |
| H358 | LOAD AND OPERATE CPUs WITH OPERATIONAL PROGRAMS | 67 |
| K470 | INTERPRET RESULTS OF MEMORY DIAGNOSTIC PROGRAMS | 60 |
| H355 | ISOLATE MALFUNCTIONS WITHIN MINI OR MICRO PROCESSORS TO CARD OR SUBASSEMBLY | 60 |
| D109 | DETERMINE TRAINING REQUIREMENTS OTHER THAN FOR OJT | 60 |
| L498 | DETECT FAULTS WITHIN BUFFERS, CONTROLLERS, OR INTERFACES USING DIAGNOSTIC PROGRAMS | 60 |
| G318 | OPERATE DISPLAY EQUIPMENT OTHER THAN FOR AIRBORNE SYSTEMS | 60 |
| H348 | DETECT FAULTS WITHIN MINI OR MICRO PROCESSORS USING FAULT INDICATORS OR STATUS PANELS | 60 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 60 |

TABLE A23

ELECTRONIC SWITCHING SYSTEMS MAINTENANCE CLUSTER
(GRP79)

| TASKS | | PERCENT MEMBERS PERFORMING (N=204) |
|---|---|---|
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 91 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 89 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 87 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 86 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 83 |
| F296 | VISUALLY INSPECT BATTERIES | 83 |
| F217 | CHECK BATTERY CELL VOLTAGE | 82 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 79 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 78 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 78 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 77 |
| F216 | CHARGE OR EQUALIZE BATTERIES | 75 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 69 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 67 |
| F264 | PERFORM PATCH PANEL OPERATIONS | 66 |
| V728 | DETECT FAULTS WITHIN POWER DISTRIBUTION SYSTEMS USING FAULT INDICATORS, STATUS PANELS, OR TEST EQUIPMENT | 66 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 65 |
| V741 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON POWER SUPPLIES | 65 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 65 |
| E200 | RESEARCH MANUALS FOR PARTS NUMBERS | 64 |
| E201 | RESEARCH MICROFICHE DOCUMENTS FOR PARTS INFORMATION | 63 |
| F277 | REMOVE OR REPLACE CIRCUIT CARD COMPONENTS SOCKETS OR WIRE WRAPS | 60 |
| V730 | DETECT FAULTS WITHIN POWER SUPPLIES USING FAULT INDICATORS, STATUS PANELS, OR TEST EQUIPMENT | 60 |
| F258 | PERFORM CARD TESTER OPERATION TO IDENTIFY FAULTY COMPONENTS | 60 |
| V726 | ALIGN POWER SUPPLY UNITS, SUCH AS RECTIFIERS, INVERTERS, CONVERTERS, OR REGULATORS | 59 |
| V734 | ISOLATE MALFUNCTIONS TO POWER SUPPLIES | 58 |
| V740 | PERFORM OPERATIONAL CHECKS OF POWER SUPPLIES | 57 |
| F276 | REMOVE OR REPLACE BATTERIES | 56 |
| V732 | DETECT FAULTS WITHIN POWER SUPPLIES USING VISUAL FAULT INDICATORS | 56 |
| V742 | PERFORM PMI ON POWER DISTRIBUTION SYSTEMS | 56 |

TABLE A24

OVERSEAS AUTOVON SWITCH REPAIR SPECIALISTS
(GRP104)

| TASKS | | PERCENT MEMBERS PERFORMING (N=103) |
|---|---|---|
| F217 | CHECK BATTERY CELL VOLTAGE | 94 |
| I376 | DETECT FAULTS WITHIN SWITCH MARKER/MATRIX CIRCUITS | 92 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 92 |
| I395 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON AUTOVON SUBSYSTEMS | 91 |
| I377 | DETECT FAULTS WITHIN TRUNK SCANNER CIRCUITS | 90 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 89 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 89 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 88 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 88 |
| I384 | ISOLATE MALFUNCTIONS WITHIN SWITCH MARKER/MATRIX CIRCUITS | 88 |
| I393 | PERFORM OPERATIONAL CHECKS OF SWITCH MARKER/MATRIX CIRCUITS | 88 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 88 |
| F296 | VISUALLY INSPECT BATTERIES | 88 |
| I388 | PERFORM OPERATIONAL CHECKS OF COMPARATOR CIRCUITS | 86 |
| I375 | DETECT FAULTS WITHIN SWITCH COMPARATOR CIRCUITS | 86 |
| I369 | ADJUST LINE OR TRUNK CIRCUITS | 85 |
| I385 | ISOLATE MALFUNCTIONS WITHIN TRUNK SCANNER CIRCUITS | 85 |
| I386 | PERFORM EMERGENCY RECOVERY PROCEDURES | 84 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 83 |
| I370 | DETECT FAULTS WITHIN CALL PROCESSING CIRCUITS | 83 |
| I378 | ISOLATE MALFUNCTIONS WITHIN CALL PROCESSING CIRCUITS | 83 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 82 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS EQUIPMENT | 81 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 81 |
| I373 | DETECT FAULTS WITHIN ELECTRO-MECHANICAL LINE OR TRUCK CIRCUITS | 80 |
| I387 | PERFORM OPERATIONAL CHECKS OF CALL PROCESSING CIRCUITS | 80 |
| I383 | ISOLATE MALFUNCTIONS WITHIN SWITCH COMPARATOR CIRCUITS | 80 |
| I396 | REMOVE OR REPLACE AUTOVON ELECTRO-MECHANICAL CIRCUIT COMPONENTS | 78 |
| I394 | PERFORM OPERATIONAL CHECKS OF TRUNK SCANNER CIRCUITS | 76 |
| F216 | CHARGE OR EQUALIZE BATTERIES | 75 |

TABLE A25

TACTICAL CONTROL SWITCH REPAIRMEN
(GRP125)

| TASKS | | PERCENT MEMBERS PERFORMING (N=101) |
|---|---|---|
| J443 | PERFORM OPERATIONAL CHECKS OF TA-341/TT TELEPHONES | 92 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 90 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 89 |
| J426 | ISOLATE MALFUNCTIONS WITHIN TA-341/TT TELEPHONES | 88 |
| J451 | REMOVE OR REPLACE HANDSETS | 87 |
| J456 | REMOVE OR REPLACE TA-341/TT TELEPHONES | 86 |
| J453 | REMOVE OR REPLACE MOBILE ELECTRONIC SWITCHING CIRCUIT CARDS | 86 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 85 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 85 |
| J448 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON MOBILE ELECTRONIC SWITCHING EQUIPMENT | 85 |
| J435 | PERFORM OPERATIONAL CHECKS OF HANDSETS | 85 |
| F276 | REMOVE OR REPLACE BATTERIES | 85 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 84 |
| J402 | DETECT FAULTS WITHIN LINE CIRCUITS | 83 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 82 |
| J452 | REMOVE OR REPLACE HEADSETS | 82 |
| J409 | DETECT FAULTS WITHIN SCANNER CIRCUITS | 82 |
| F264 | PERFORM PATCH PANEL OPERATIONS | 81 |
| J408 | DETECT FAULTS WITHIN REGISTER CIRCUITS | 80 |
| J415 | ISOLATE MALFUNCTIONS WITHIN HANDSETS | 80 |
| J436 | PERFORM OPERATIONAL CHECKS OF HEADSETS | 79 |
| J416 | ISOLATE MALFUNCTIONS WITHIN HEADSETS | 79 |
| J447 | PERFORM OPERATIONAL CHECKS OF TRUNK CIRCUITS | 79 |
| J407 | DETECT FAULTS WITHIN NUMBER GROUPS | 79 |
| J431 | PERFORM OPERATIONAL CHECKS OF CONFERENCE CIRCUITS | 79 |
| J422 | ISOLATE MALFUNCTIONS WITHIN REGISTER CIRCUITS | 78 |
| J417 | ISOLATE MALFUNCTIONS WITHIN LINE CIRCUITS | 78 |
| J432 | PERFORM OPERATIONAL CHECKS OF CORD CIRCUITS | 78 |
| F296 | VISUALLY INSPECT BATTERIES | 77 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEM EQUIPMENT | 76 |

TABLE A26

GENERAL FACILITY MAINTENANCE SPECIALISTS
(GRP69)

| TASKS | | PERCENT MEMBERS PERFORMING (N=78) |
|---|---|---|
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 85 |
| F293 | SOLDER OR DESOLDER ELECTRONIC EQUIPMENT USING SOLDERING IRONS | 81 |
| F287 | REPLACE MINOR ELECTRICAL HARDWARE, SUCH AS LAMPS, SWITCHES, FUSES, OR CONNECTORS | 81 |
| F279 | REMOVE OR REPLACE ELECTRONIC CIRCUIT CARDS OR PRINTED CIRCUIT BOARDS | 78 |
| F262 | PERFORM GENERAL CLEANING OF ELECTRONIC COMPUTER OR SWITCHING SYSTEM EQUIPMENT | 76 |
| F278 | REMOVE OR REPLACE DISCRETE CIRCUIT COMPONENTS, SUCH AS TRANSISTORS, DIODES, OR RESISTORS | 73 |
| F281 | REMOVE OR REPLACE FILTERS | 72 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 68 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 67 |
| F288 | REPLACE NONELECTRICAL HARDWARE, SUCH AS SCREWS, NUTS, EJECTORS, OR COVERS | 62 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 60 |
| F222 | CLEAN OR TREAT FILTERS | 58 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 56 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 55 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 54 |
| F223 | CLEAN READ/WRITE HEADS | 50 |
| F258 | PERFORM CARD TESTER OPERATION TO IDENTIFY FAULTY COMPONENTS | 50 |
| F280 | REMOVE OR REPLACE ELECTRONIC EQUIPMENT PINS, CONNECTORS, OR PLUGS | 47 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 45 |
| E200 | RESEARCH MANUALS FOR PARTS NUMBERS | 44 |
| F233 | INTERPRET WIRING DIAGRAMS FOR INTER OR INTRA UNIT DATA FLOW | 40 |
| F270 | PERFORM VISUAL INSPECTIONS OF CABLES, CABLE TROUGHS, OR CONNECTOR AIR DUCTS | 40 |
| F269 | PERFORM SELF-TEST PROCEDURES ON DRAWER TESTERS | 36 |
| F260 | PERFORM DRAWER TESTER OPERATION TO IDENTIFY FAULTY CARD UNDER TEST | 36 |
| F259 | PERFORM CORROSION CONTROL OTHER THAN GENERAL CLEANING | 36 |
| E201 | RESEARCH MICROFICHE DOCUMENTS FOR PARTS INFORMATION | 35 |
| S664 | PERFORM PMI ON PRINTERS | 33 |
| F264 | PERFORM PATCH PANEL OPERATIONS | 33 |
| V741 | PERFORM PREVENTIVE MAINTENANCE INSPECTIONS (PMI) ON POWER SUPPLIES | 32 |
| E159 | MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST) | 31 |

TABLE A27

MANAGEMENT PERSONNEL CLUSTER
(GRP19)

| TASKS | | PERCENT MEMBERS PERFORMING (N=373) |
|---|---|---|
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 79 |
| B41 | DRAFT OR WRITE CORRESPONDENCE | 71 |
| C93 | REVIEW CORRESPONDENCE | 65 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 63 |
| A7 | DETERMINE WORK PRIORITIES | 63 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 61 |
| B50 | ORIENT NEWLY ASSIGNED PERSONNEL | 58 |
| E133 | ESCORT VISITORS THROUGH FACILITIES | 57 |
| B34 | COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS | 54 |
| C89 | PREPARE AIRMAN PERFORMANCE REPORTS (APR) | 53 |
| A6 | DETERMINE SUPPLY REQUIREMENTS | 49 |
| A29 | SCHEDULE TEMPORARY DUTY, LEAVES, OR PASSES | 49 |
| B30 | COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES | 49 |
| A24 | PLAN WORK ASSIGNMENTS | 48 |
| C66 | EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS | 47 |
| E128 | ADVISE COMMAND STAFF AGENCIES ON CURRENT OPERATIONAL STATUS OF EQUIPMENT OR SYSTEMS | 46 |
| A1 | ASSIGN PERSONNEL DUTY POSITIONS | 46 |
| C63 | DRAFT REPLIES TO INSPECTION REPORTS | 45 |
| A16 | ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES | 44 |
| C69 | EVALUATE INDIVIDUALS FOR RECOGNITION | 44 |
| D108 | DETERMINE OJT TRAINING REQUIREMENTS | 44 |
| E198 | PREPARE SCHEDULES OR ROSTERS, SUCH AS SHIFT SCHEDULES OR RECALL ROSTERS | 43 |
| C90 | PREPARE RECOMMENDATIONS FOR AWARDS | 43 |
| C94 | REVIEW EQUIPMENT RECORDS | 43 |
| A5 | DETERMINE PERSONNEL REQUIREMENTS | 43 |
| A4 | DETERMINE EQUIPMENT REQUIREMENTS | 42 |
| A12 | DEVELOP WORK METHODS OR PROCEDURES | 42 |
| A15 | ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDING OPERATING PROCEDURES (SOP) | 42 |
| D106 | COUNSEL TRAINEES ON TRAINING PROGRESS | 41 |
| B45 | IMPLEMENT SELF-INSPECTION PROGRAMS | 40 |

TABLE A28

QUALITY CONTROL INSPECTORS
(GRP90)

| TASKS | | PERCENT MEMBERS PERFORMING (N=44) |
|---|---|---|
| C62 | DRAFT INSPECTION REPORTS | 98 |
| E163 | MAKE ENTRIES ON AF FORMS 2419 (ROUTING AND REVIEW OF QUALITY CONTROL REPORTS) | 95 |
| C88 | PERFORM QUALITY CONTROL INSPECTIONS OF ELECTRONIC COMPUTER OR SWITCHING SYSTEM EQUIPMENT | 91 |
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 91 |
| E164 | MAKE ENTRIES ON AF FORMS 2420 (QUALITY CONTROL INSPECTION SUMMARY) | 89 |
| C66 | EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS | 86 |
| C76 | EVALUATE QUALITY CONTROL PROCEDURES | 84 |
| B42 | IMPLEMENT QUALITY CONTROL PROGRAMS | 80 |
| E162 | MAKE ENTRIES ON AF FORMS 2415 (QUALITY CONTROL CHECKSHEET) | 80 |
| B41 | DRAFT OR WRITE CORRESPONDENCE | 80 |
| C95 | REVIEW TECHNICAL ORDER IMPROVEMENT REPORTS | 80 |
| C93 | REVIEW CORRESPONDENCE | 77 |
| C87 | PERFORM MAINTENANCE STANDARDIZATION PROGRAM INSPECTIONS | 73 |
| C74 | EVALUATE MATERIEL DEFICIENCY REPORTS | 73 |
| A8 | DEVELOP INSPECTION PROCEDURES | 73 |
| C94 | REVIEW EQUIPMENT RECORDS | 68 |
| C71 | EVALUATE MAINTENANCE OF PUBLICATION LIBRARIES | 68 |
| B30 | COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES | 66 |
| C67 | EVALUATE CORROSION CONTROL PROGRAMS | 66 |
| C63 | DRAFT REPLIES TO INSPECTION REPORTS | 64 |
| E176 | MAKE ENTRIES ON AFTO FORMS 22 (TECHNICAL ORDER SYSTEM PUBLICATION IMPROVEMENT REPORT AND REPLY) | 64 |
| B45 | IMPLEMENT SELF-INSPECTION PROGRAMS | 61 |
| C64 | EVALUATE ADMINISTRATIVE FORMS, FILES, OR PROCEDURES | 59 |
| C72 | EVALUATE MAINTENANCE OR UTILIZATION OF WORKSPACE, EQUIPMENT, OR SUPPLIES | 59 |
| C58 | CERTIFY STATUS OF REPARABLE, SERVICEABLE, OR CONDEMNED PARTS | 57 |
| C85 | INITIATE UNSATISFACTORY OR MATERIAL DEFICIENCY REPORTS | 52 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 52 |
| B40 | DRAFT INPUTS TO HIGHER HEADQUARTERS DIRECTIVES | 52 |
| B31 | CONDUCT BRIEFINGS | 52 |
| A15 | ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDING OPERATING PROCEDURES (SOP) | 50 |

TABLE A29

MAINTENANCE WORKCENTER NCOICs
(GRP324)

| TASKS | | PERCENT MEMBERS PERFORMING (N=125) |
|---|---|---|
| B50 | ORIENT NEWLY ASSIGNED PERSONNEL | 97 |
| A7 | DETERMINE WORK PRIORITIES | 96 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 96 |
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 94 |
| C93 | REVIEW CORRESPONDENCE | 94 |
| C89 | PREPARE AIRMAN PERFORMANCE REPORTS (APR) | 94 |
| B41 | DRAFT OR WRITE CORRESPONDENCE | 91 |
| A24 | PLAN WORK ASSIGNMENTS | 91 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 91 |
| B34 | COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS | 90 |
| A1 | ASSIGN PERSONNEL TO DUTY POSITIONS | 90 |
| D108 | DETERMINE OJT TRAINING REQUIREMENTS | 90 |
| A29 | SCHEDULE TEMPORARY DUTY, LEAVES, OR PASSES | 89 |
| E133 | ESCORT VISITORS THROUGH FACILITIES | 86 |
| A2 | ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL | 86 |
| A6 | DETERMINE SUPPLY REQUIREMENTS | 84 |
| C90 | PREPARE RECOMMENDATIONS FOR AWARDS | 83 |
| C69 | EVALUATE INDIVIDUALS FOR RECOGNITION | 82 |
| B54 | SUPERVISE ELECTRONIC COMPUTER AND SWITCHING SYSTEMS TECHNICIANS (AFSC 30574) | 81 |
| D109 | DETERMINE TRAINING REQUIREMENTS OTHER THAN FOR OJT | 81 |
| E198 | PREPARE SCHEDULES OR ROSTERS, SUCH AS SHIFT SCHEDULES OR RECALL ROSTERS | 81 |
| B37 | DIRECT MAINTENANCE OF FACILITIES OR WORK AREAS | 80 |
| C63 | DRAFT REPLIES TO INSPECTION REPORTS | 80 |
| A16 | ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES | 80 |
| B55 | SUPERVISE ELECTRONIC COMPUTER AND SWITCHING SYSTEMS SPECIALISTS (AFSC 30554) | 78 |
| C83 | INDORSE AIRMAN PERFORMANCE REPORTS (APR) | 78 |
| A5 | DETERMINE PERSONNEL REQUIREMENTS | 78 |
| B47 | INITIATE PERSONNEL ACTION REQUESTS | 78 |
| B39 | DIRECT MAINTENANCE OR UTILIZATION OF EQUIPMENT OR SUPPLIES | 78 |
| C96 | SELECT INDIVIDUALS FOR SPECIALIZED TRAINING | 78 |

TABLE A30

MAINTENANCE CONTROLLERS
(GRP297)

| TASKS | | PERCENT MEMBERS PERFORMING (N=20) |
|---|---|---|
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 95 |
| A7 | DETERMINE WORK PRIORITIES | 90 |
| B41 | DRAFT OR WRITE CORRESPONDENCE | 90 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 85 |
| D104 | CONDUCT OJT | 85 |
| B31 | CONDUCT BRIEFINGS | 85 |
| E133 | ESCORT VISITORS THROUGH FACILITIES | 85 |
| E198 | PREPARE SCHEDULES OR ROSTERS, SUCH AS SHIFT SCHEDULES OR RECALL ROSTERS | 85 |
| E128 | ADVISE COMMAND STAFF AGENCIES ON CURRENT OPERATIONAL STATUS OF EQUIPMENT OR SYSTEMS | 80 |
| E140 | MAINTAIN AUTHORIZED ENTRANCE LISTS | 80 |
| D108 | DETERMINE OJT TRAINING REQUIREMENTS | 80 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 80 |
| E151 | MAINTAIN STANDARD AIR FORCE PUBLICATIONS, REGULATIONS, OR MANUALS | 80 |
| A15 | ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDING OPERATING PROCEDURES (SOP) | 80 |
| D106 | COUNSEL TRAINEES ON TRAINING PROGRESS | 80 |
| E136 | ISSUE JOB CONTROL NUMBERS | 75 |
| D118 | MAINTAIN MAINTENANCE MANAGEMENT INFORMATION AND CONTROL SYSTEM (MMICS) WORKCENTER LISTINGS | 75 |
| E148 | MAINTAIN PREVENTIVE MAINTENANCE INSPECTION (PMI) LISTINGS | 75 |
| E150 | MAINTAIN SECURITY OF FACILITIES OR CLASSIFIED MATERIALS | 75 |
| A19 | PLAN BRIEFINGS | 75 |
| E137 | MAINTAIN ADMINISTRATIVE FILES | 75 |
| A16 | ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES | 75 |
| B50 | ORIENT NEWLY ASSIGNED PERSONNEL | 75 |
| E131 | DIRECT ACTIONS AS MAINTENANCE CONTROLLER TO CORRECT DEFICIENCIES IN EQUIPMENT AND SYSTEMS | 70 |
| E132 | DISPATCH MAINTENANCE PERSONNEL | 70 |
| E144 | MAINTAIN MASTER IDENTIFICATION (ID) LISTINGS | 70 |
| E157 | MAKE ENTRIES ON AF FORMS 1530 (PUNCH CARD TRANSCRIPT) | 70 |
| E152 | MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS OTHER THAN FOR TRAINING | 70 |
| C89 | PREPARE AIRMAN PERFORMANCE REPORTS (APR) | 70 |
| A24 | PLAN WORK ASSIGNMENTS | 70 |

TABLE A31

PROGRAM MANAGERS
(GRP111)

| TASKS | | PERCENT MEMBERS PERFORMING (N=25) |
|---|---|---|
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 96 |
| B41 | DRAFT OR WRITE CORRESPONDENCE | 92 |
| C93 | REVIEW CORRESPONDENCE | 88 |
| B30 | COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES | 76 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 76 |
| A5 | DETERMINE PERSONNEL REQUIREMENTS | 76 |
| E133 | ESCORT VISITORS THROUGH FACILITIES | 72 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 68 |
| A4 | DETERMINE EQUIPMENT REQUIREMENTS | 68 |
| A6 | DETERMINE SUPPLY REQUIREMENTS | 68 |
| A7 | DETERMINE WORK PRIORITIES | 64 |
| C69 | EVALUATE INDIVIDUALS FOR RECOGNITION | 64 |
| C66 | EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS | 60 |
| B40 | DRAFT INPUTS TO HIGHER HEADQUARTERS DIRECTIVES | 60 |
| A15 | ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDING OPERATING PROCEDURES (SOP) | 60 |
| E128 | ADVISE COMMAND STAFF AGENCIES ON CURRENT OPERATIONAL STATUS OF EQUIPMENT OR SYSTEMS | 56 |
| C80 | EVALUATE SUGGESTIONS | 56 |
| E130 | CONDUCT PHYSICAL SECURITY INSPECTIONS OF FACILITIES | 56 |
| A20 | PLAN EQUIPMENT OR FACILITY MAINTENANCE REQUIREMENTS | 52 |
| C90 | PREPARE RECOMMENDATIONS FOR AWARDS | 52 |
| C61 | CONDUCT STAFF ASSISTANCE VISITS | 52 |
| A19 | PLAN BRIEFINGS | 52 |
| B31 | CONDUCT BRIEFINGS | 48 |
| C99 | WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS | 44 |
| C83 | INDORSE AIRMAN PERFORMANCE REPORTS (APR) | 44 |
| C89 | PREPARE AIRMAN PERFORMANCE REPORTS (APR) | 44 |
| A21 | PLAN LAYOUT OF FACILITIES | 44 |
| B34 | COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS | 44 |
| A8 | DEVELOP INSPECTION PROCEDURES | 44 |
| A29 | SCHEDULE TEMPORARY DUTY, LEAVES, OR PASSES | 44 |

TABLE A32

HEADQUARTERS ADMINISTRATIVE STAFF PERSONNEL
(GRP96)

| TASKS | | PERCENT MEMBERS PERFORMING (N=34) |
|---|---|---|
| B41 | DRAFT OR WRITE CORRESPONDENCE | 94 |
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 94 |
| B30 | COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES | 79 |
| C93 | REVIEW CORRESPONDENCE | 65 |
| B40 | DRAFT INPUTS TO HIGHER HEADQUARTERS DIRECTIVES | 62 |
| C99 | WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS | 50 |
| A19 | PLAN BRIEFINGS | 47 |
| E128 | ADVISE COMMAND STAFF AGENCIES ON CURRENT OPERATIONAL STATUS OF EQUIPMENT OR SYSTEMS | 44 |
| B31 | CONDUCT BRIEFINGS | 44 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 35 |
| A25 | PREPARE AGENDA FOR STAFF MEETINGS | 29 |
| C95 | REVIEW TECHNICAL ORDER IMPROVEMENT REPORTS | 29 |
| E137 | MAINTAIN ADMINISTRATIVE FILES | 29 |
| E133 | ESCORT VISITORS THROUGH FACILITIES | 29 |
| C61 | CONDUCT STAFF ASSISTANCE VISITS | 29 |
| A4 | DETERMINE EQUIPMENT REQUIREMENTS | 26 |
| C62 | DRAFT INSPECTION REPORTS | 26 |
| E130 | CONDUCT PHYSICAL SECURITY INSPECTIONS OF FACILITIES | 26 |
| E151 | MAINTAIN STANDARD AIR FORCE PUBLICATIONS, REGULATIONS, OR MANUALS | 26 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 24 |
| A6 | DETERMINE SUPPLY REQUIREMENTS | 24 |
| E200 | RESEARCH MANUALS FOR PARTS NUMBERS | 24 |
| D109 | DETERMINE TRAINING REQUIREMENTS OTHER THAN FOR OJT | 21 |
| B50 | ORIENT NEWLY ASSIGNED PERSONNEL | 18 |
| A26 | PREPARE AGENDA FOR SYMPOSIUMS, CONFERENCES, OR WORKSHOPS | 18 |
| A20 | PLAN EQUIPMENT OR FACILITY MAINTENANCE REQUIREMENTS | 18 |
| C66 | EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS | 18 |
| E205 | TYPE CORRESPONDENCE, FORMS, OR REPORTS | 18 |
| A5 | DETERMINE PERSONNEL REQUIREMENTS | 18 |
| C80 | EVALUATE SUGGESTIONS | 18 |

TABLE A33

SUPPLY MONITORS
(GRP33)

| TASKS | | PERCENT MEMBERS PERFORMING (N=13) |
|---|---|---|
| E139 | MAINTAIN AF FORMS 2413 (SUPPLY CONTROL LOG) | 77 |
| E168 | MAKE ENTRIES ON AF FORMS 601B (CUSTODIAN REQUEST/RECEIPT) | 77 |
| E209 | VERIFY PRIORITY MONITOR REPORTS (D18 REPORTS) | 77 |
| E186 | MAKE ENTRIES ON DD FORMS 1348-6 (NON-NSN REQUISITON MANUAL)) | 77 |
| E207 | VERIFY DUE-OUT VALIDATION LISTINGS (M-30 LISTINGS) | 77 |
| E159 | MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REUQEST) | 77 |
| E188 | MAKE ENTRIES ON DD FORMS 1577 (UNSERVICEABLE (CONDEMNED) TAG-MATERIEL) | 77 |
| E142 | MAINTAIN DAILY DOCUMENT REGISTER AND ITEM SURVEILLANCE LISTS (DO4 LISTS) | 69 |
| E189 | MAKE ENTRIES ON DD FORMS 1577-2 (UNSERVICEABLE (REPARABLE) TAG-MATERIEL) | 69 |
| E187 | MAKE ENTRIES ON DD FORMS 1574 (SERVICEABLE TAG-MATERIEL) | 69 |
| E201 | RESEARCH MICROFICHE DOCUMENTS FOR PARTS INFORMATION | 62 |
| A6 | DETERMINE SUPPLY REQUIREMENTS | 62 |
| B41 | DRAFT OR WRITE CORRESPONDENCE | 62 |
| E200 | RESEARCH MANUALS FOR PARTS NUMBERS | 54 |
| E135 | INVENTORY SUPPLIES, EQUIPMENT, OR TOOLS EXCEPT DURING EQUIPMENT INSTALLATION OR RECONFIGURATION | 54 |
| E193 | PERFORM AS FORWARD SUPPLY POINT MONITOR | 54 |
| E206 | VERIFY DUE-IN FROM MAINTENANCE (DIFM) DOCUMENT LISTINGS | 54 |
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 54 |
| E180 | MAKE ENTRIES ON AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 54 |
| E149 | MAINTAIN PROPERTY CUSTODIAN AUTHORIZATION/CUSTODY RECEIPT LISTINGS (CA/CRL) | 46 |
| E141 | MAINTAIN BENCH STOCK PARTS OR EQUIPMENT LEVELS | 46 |
| E185 | MAKE ENTRIES ON DD FORMS 1348 SERIES (DOD SINGLE LINE ITEM REQUISITION SYSTEM DOCUMENT), EXCEPT DD FORMS 1348-6 | 46 |
| C58 | CERTIFY STATUS OF REPARABLE, SERVICEABLE, OR CONDEMNED PARTS | 46 |
| e195 | PREPARE EQUIPMENT FOR PRECISION MEASUREMENT EQUIPMENT (PME) PROCESSING | 38 |
| C92 | REVIEW AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG) | 38 |
| E133 | ESCORT VISITORS THROUGH FACILITIES | 38 |
| E179 | MAKE ENTRIES ON AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD) | 38 |
| E137 | MAINTAIN ADMINISTRATIVE FILES | 31 |
| E147 | MAINTAIN PRECISION MEASUREMENT EQUIPMENT (PME) CALIBRATION LISTINGS AND SCHEDULES | 31 |
| C85 | INITIATE UNSATISFACTORY OR MATERIAL DEFICIENCY REPORTS | 31 |

TABLE A34

JOB CONTROLLERS
(GRP193)

| TASKS | | PERCENT MEMBERS PERFORMING (N=30) |
|---|---|---|
| E136 | ISSUE JOB CONTROL NUMBERS | 97 |
| E131 | DIRECT ACTIONS AS MAINTENANCE CONTROLLER TO CORRECT DEFICIENCIES IN EQUIPMENT AND SYSTEMS | 87 |
| E132 | DISPATCH MAINTENANCE PERSONNEL | 87 |
| E152 | MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS OTHER THAN FOR TRAINING | 83 |
| E167 | MAKE ENTRIES ON AF FORMS 264 (JOB/STATUS DOCUMENT) | 70 |
| E128 | ADVISE COMMAND STAFF AGENCIES ON CURRENT OPERATIONAL STATUS OF EQUIPMENT OR SYSTEMS | 67 |
| A7 | DETERMINE WORK PRIORITIES | 67 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 53 |
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 47 |
| B35 | DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS | 40 |
| B31 | CONDUCT BRIEFINGS | 40 |
| E190 | MAKE ENTRIES ON DD FORMS 1753 (MASTER STATION LOG) | 37 |
| E144 | MAINTAIN MASTER IDENTIFICATION (ID) LISTINGS | 37 |
| E154 | MAINTAIN VEHICLE CONTROL LOGS | 37 |
| B50 | ORIENT NEWLY ASSIGNED PERSONNEL | 37 |
| E150 | MAINTAIN SECURITY OF FACILITIES OR CLASSIFIED MATERIALS | 33 |
| E148 | MAINTAIN PREVENTIVE MAINTENANCE INSPECTION (PMI) LISTINGS | 33 |
| D118 | MAINTAIN MAINTENANCE MANAGEMENT INFORMATION AND CONTROL SYSTEM (MMICS) WORKCENTER LISTINGS | 30 |
| E155 | MAINTAIN VISITOR REGISTERS | 30 |
| E130 | CONDUCT PHYSICAL SECURITY INSPECTIONS OF FACILITIES | 30 |
| E133 | ESCORT VISITORS THROUGH FACILITIES | 30 |
| A19 | PLAN BRIEFINGS | 27 |
| A6 | DETERMINE SUPPLY REQUIREMENTS | 27 |
| E169 | MAKE ENTRIES ON AF FORMS 861 (BASE/TRANSIENT JOB CONTROL NUMBER REGISTER) | 23 |
| B51 | REVISE DAILY MAINTENANCE PLANS TO MEET OPERATIONAL COMMITMENTS | 23 |
| B49 | MAINTAIN EMERGENCY OR CONTINGENCY PLANS | 23 |
| E208 | VERIFY ENTRY AUTHORIZATION OF VISITORS | 23 |
| C89 | PREPARE AIRMAN PERFORMANCE REPORTS (APR) | 23 |
| E198 | PREPARE SCHEDULES OR ROSTERS, SUCH AS SHIFT SCHEDULES OR RECALL ROSTERS | 23 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 20 |

TABLE A35

SYSTEMS CONTROLLERS
(GRP56)

| TASKS | | PERCENT MEMBERS PERFORMING (N=19) |
|---|---|---|
| G321 | OPERATE KEYBOARDS OTHER THAN FOR AIRBORNE SYSTEMS | 95 |
| E128 | ADVISE COMMAND STAFF AGENCIES ON CURRENT OPERATIONAL STATUS OF EQUIPMENT OR SYSTEMS | 79 |
| E172 | MAKE ENTRIES ON AFCC FORMS 1517 (SACCS TROUBLE MONITOR REPORT) | 68 |
| G314 | MONITOR OPERATION OF ELECTRONIC COMPUTER OR SWITCHING SYSTEMS OTHER THAN FOR AIRBORNE SYSTEMS | 68 |
| E171 | MAKE ENTRIES ON AFCC FORMS 1516 (SACCS TROUBLE MONITOR SURVEY) | 68 |
| F264 | PERFORM PATCH PANEL OPERATIONS | 68 |
| E190 | MAKE ENTRIES ON DD FORMS 1753 (MASTER STATION LOG) | 63 |
| E170 | MAKE ENTRIES ON AFCC FORMS 1515 (SYSTEM CONTROL DAILY EQUIPMENT RELEASES) | 63 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 63 |
| E199 | PROVIDE GUIDANCE ON SYSTEM RESTORAL PROCEDURES | 37 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 37 |
| E152 | MAINTAIN STATUS BOARDS, GRAPHS, OR CHARTS OTHER THAN FOR TRAINING | 32 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 32 |
| E130 | CONDUCT PHYSICAL SECURITY INSPECTIONS OF FACILITIES | 32 |
| D104 | CONDUCT OJT | 32 |
| G318 | OPERATE DISPLAY EQUIPMENT OTHER THAN FOR AIRBORNE SYSTEMS | 26 |
| G320 | OPERATE INPUT/OUTPUT (I/O) ASSEMBLIES, SUCH AS BUFFERS, CONTROLLERS, OR INTERFACES OTHER THAN FOR AIRBORNE SYSTEMS | 26 |
| B30 | COMPILE INFORMATION FOR REPORTS OR STAFF STUDIES | 26 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 26 |
| E131 | DIRECT ACTIONS AS MAINTENANCE CONTROLLER TO CORRECT DEFICIENCIES IN EQUIPMENT AND SYSTEMS | 26 |
| D107 | DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION | 26 |
| G324 | OPERATE OPERATORS CONSOLES OTHER THAN FOR AIRBORNE SYSTEMS | 21 |
| E150 | MAINTAIN SECURITY OF FACILITIES OR CLASSIFIED MATERIALS | 21 |
| A7 | DETERMINE WORK PRIORITIES | 21 |
| G301 | COORDINATE COMPUTER SYSTEM FUNCTIONAL REQUIREMENTS WITH USERS | 21 |
| B34 | COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS | 21 |
| B35 | DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS | 21 |
| B50 | ORIENT NEWLY ASSIGNED PERSONNEL | 21 |
| G302 | COORDINATE COMPUTER SYSTEMS INTERFACE AND INTEGRATION REQUIREMENTS WITH USERS | 16 |
| G341 | TEST AND IMPLEMENT PROGRAM PATCHES | 16 |

TABLE A36

RESIDENT TRAINING INSTRUCTORS
(GRP140)

| | TASKS | PERCENT MEMBERS PERFORMING (N=54) |
|---|---|---|
| D103 | CONDUCT CLASSROOM TRAINING OTHER THAN FOR OJT | 100 |
| D122 | PREPARE LESSON PLANS | 100 |
| D125 | SCORE TESTS | 98 |
| D100 | ADMINISTER TESTS | 96 |
| D111 | DEVELOP TRAINING AIDS | 81 |
| D106 | COUNSEL TRAINEES ON TRAINING PROGRESS | 78 |
| D107 | DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION | 76 |
| D126 | WRITE TEST QUESTIONS | 76 |
| D116 | EVALUATE RESIDENT COURSE STUDENT PROGRESS | 65 |
| F227 | INTERPRET BLOCK DIAGRAMS FOR FAULT ISOLATION | 43 |
| F228 | INTERPRET LOGIC OR SCHEMATIC DIAGRAMS FOR FAULT ISOLATION | 41 |
| F229 | INTERPRET ON-LINE STATUS PANEL INDICATIONS FOR FAULT ISOLATION | 39 |
| D120 | MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS OTHER THAN MMICS WORKCENTER LISTINGS | 37 |
| B34 | COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED MATTERS | 37 |
| F232 | INTERPRET VISUAL FAULT INDICATORS FOR FAULT ISOLATION | 37 |
| D110 | DEVELOP RESIDENT COURSE OR CAREER DEVELOPMENT COURSE (CDC) CURRICULUM MATERIALS | 35 |
| F250 | LOCATE UNITS, MODULES, ROWS, COLUMNS, COMPONENTS, PINS, AMPHENOLS, OR TEST POINTS USING ALPHA/NUMERIC DESIGNATORS | 35 |
| F231 | INTERPRET PROGRAM PRINTOUTS FOR FAULT ISOLATION | 33 |
| E135 | INVENTORY SUPPLIES, EQUIPMENT, OR TOOLS EXCEPT DURING EQUIPMENT INSTALLATION OR RECONFIGURATION | 31 |
| D117 | EVALUATE TRAINING METHODS OR TECHNIQUES | 30 |
| D124 | PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT | 30 |
| F245 | LOAD PROGRAM USING MAGNETIC TAPES | 28 |
| F230 | INTERPRET PROGRAM ABSTRACTS OR OTHER PROGRAM DATA FOR FAULT ISOLATION | 28 |
| F243 | LOAD PROGRAMS USING KEYBOARDS | 26 |
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 26 |
| E153 | MAINTAIN TECHNICAL ORDER LIBRARIES | 24 |
| E133 | ESCORT VISTORS THROUGH FACILITIES | 24 |
| G320 | OPERATE INPUT/OUPUT (I/O) ASSEMBLIES, SUCH AS BUFFERS, CONTROLLERS, OR INTERFACES OTHER THAN FOR AIRBORNE SYSTEMS | 24 |
| F223 | INTERPRET WIRING DIAGRAMS FOR INTER OR INTRA UNIT DATA FLOW | 22 |
| G321 | OPERATE KEYBOARDS OTHER THAN FOR AIRBORNE SYSTEMS | 22 |

TABLE A37

INSTRUCTOR SUPERVISORS
(GRP100)

| TASKS | | PERCENT MEMBERS PERFORMING (N=10) |
|---|---|---|
| D103 | CONDUCT CLASSROOM TRAINING OTHER THAN FOR OJT | 90 |
| D106 | COUNSEL TRAINEES ON TRAINING PROGRESS | 90 |
| D125 | SCORE TESTS | 90 |
| D101 | ASSIGN COURSE INSTRUCTORS | 80 |
| D100 | ADMINISTER TESTS | 80 |
| D126 | WRITE TEST QUESTIONS | 80 |
| B48 | INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES | 80 |
| D122 | PREPARE LESSON PLANS | 70 |
| D123 | PREPARE TRAINING SCHEDULES | 70 |
| D120 | MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS OTHER THAN MMICS WORKCENTER LISTINGS | 70 |
| D124 | PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT | 70 |
| D117 | EVALUATE TRAINING METHODS OR TECHNIQUES | 70 |
| B50 | ORIENT NEWLY ASSIGNED PERSONNEL | 70 |
| A18 | PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS | 70 |
| D114 | EVALUATE INSTRUCTOR PERFORMANCE | 60 |
| D116 | EVALUATE RESIDENT COURSE STUDENT PROGRESS | 60 |
| C69 | EVALUATE INDIVIDUALS FOR RECOGNITION | 60 |
| A1 | ASSIGN PERSONNEL TO DUTY POSITIONS | 60 |
| B34 | COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED MATTERS | 60 |
| C93 | REVIEW CORRESPONDENCE | 60 |
| A29 | SCHEDULE TEMPORARY DUTY, LEAVES, OR PASSES | 60 |
| D127 | WRITE TRAINING REPORTS | 50 |
| B31 | CONDUCT BRIEFINGS | 50 |
| A3 | COORDINATE JOB REQUIREMENTS WITH OTHER SECTIONS | 50 |
| E198 | PREPARE SCHEDULES OR ROSTERS, SUCH AS SHIFT SCHEDULES OR RECALL ROSTERS | 50 |
| D111 | DEVELOP TRAINING AIDS | 50 |
| D107 | DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION | 50 |
| D113 | DIRECT OR IMPLEMENT TRAINING PROGRAMS OTHER THAN OJT | 50 |
| C89 | PREPARE AIRMAN PERFORMANCE REPORTS (APR) | 50 |
| A7 | DETERMINE WORK PRIORITIES | 50 |

END

FILMED

8